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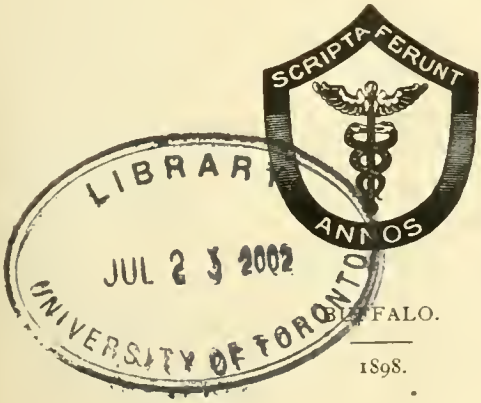

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Original Communications.

CHRONIC SPECIFIC URETHRITIS.[1]

By J. HENRY DOWD, M. D., Buffalo, N. Y

HERETOFORE I have refrained from writing on the subject of chronic specific urethritis, because it is a practice that necessitates the possession of a lot of expensive instruments, which, except in the hands of a person using the same several times daily, would become a white elephant. The care of the same, together with the modus operandi, demands time which the general practitioner cannot spare, and unless the technique is carefully followed you cannot hope to have the result wished—namely, a cure.

The male urethra has an average length of 8½ inches to 9 inches, and for convenience I will divide it into two portions,—anterior and posterior; the anterior being that portion from the meatus to the membranous, and is about 5 to 6 inches in length. Here we find a quite powerful voluntary muscle, the compressor urethræ, this being about ½ to ¾ inch in length, surrounding the membranous portion, and dividing the canal into two distinct parts. Behind this and about 2½ inches long, the urethra is continued through the prostate to the vesicle opening, and this is called the posterior urethra.

The pathology of chronic urethritis I will pass by with a few words. The most important pathological condition found is localised foci of inflammation, extending in depth according to the age of the patient. This is usually accompanied by congestion of the whole mucous tract. From these local foci sometimes spring granulations, ulceration may result, and lastly involvement of one or several follicles, or the prostatic sinuses may act as a fortress from

1. Read at the meeting of the Alumni Association, Niagara University, May 12, 1897; Physicians' Club, March 24, 1897.

which the enemy may pour out shot in the form of a morning drop, with little or no chance of destruction, except by instruments I will later describe, which must penetrate to the deepest recesses.

It might be well here to review briefly the anatomy from within out:—epithelium, which consists of three layers; sub-epithelial tissue, consisting of connective tissue; blood and lymph vessels; mucous membrane; sub-mucous tissue; muscular, two layers, and cavernous tissue. The mucous membrane is studded with small cavities, called follicles; in these at times may lurk the germs which make a urethritis indefinite. Half inch from the meatus is a small band-like projection, sometimes well developed. Do not diagnosticate it as a stricture—it is the navicular valve. Nothing now is found of importance until the posterior urethra is reached, where we find the openings of the ejaculatory ducts, prostatic sinuses, caput gallinaginis and innumerable follicles. The mucous membrane varies in color, being from the meatus backward as follows: whitish, light pink, pink, until at the compressor muscle it is a very bright red. The posterior urethra is also very red, almost resembling blood.

The symptoms of chronic urethritis I consider unnecessary to repeat. Let me answer a question I am frequently asked, and it will suffice for the objective symptoms. When is a man cured of gonorrhea? When his morning urine is in the same condition as before he had the first attack, viz.:—perfectly cleanand free from any sediment. Exceptions—if there should be one almost colorless floating shred, and the microscope shows it to consist of only mucus and epithelial cells. For as long as these shreds contain pus or gonococcus, the man is a dangerous individual. The diagnosis is comparatively easy, for from the history one should at once know whether he is to treat a chronic urethritis or a urethral chancre. The diagnosis of the portion of the urethra affected is quite a valuable aid in treatment.

As I have already said, the compressor muscle divides the canal into two parts. Any secretions formed anterior cannot gravitate beyond this muscle, and any behind cannot come forward. It is here our two-beaker test plays an important part. Have the patient urinate in two glasses. The first is turbid, and contains small shred-like pieces. The second portion is also turbid, but less so than the first. This shows an antero-posterior involvement. Should the second contain small comma-like plugs, it indicates the

prostatic sinuses are involved, and as the bladder contracts to expel the last few drops of urine, these were squeezed out.

Now, supposing the first glass to be turbid and containing shreds, but the second clear. Generally speaking this shows anterior trouble only; but not always, for if the posterior urethra is not involved sufficiently to cause adequate destruction of epithelium and the like, so it can readily flow backward and mix with the urine in the bladder, it will be washed out by the first stream, thus rendering the second clear, and deceiving us in our diagnosis. Taking into consideration the history of the case, and the amount of turbidity of the first specimen, I always on general principles medicate the posterior urethra; for I think I am safe in saying that 90 per cent. of all cases become posterior when they are four weeks or over in age. If you want to be very positive, a catheter can be passed as far as the compressor muscle, and the anterior urethra washed out with clean water. Or with a small syringe inject the anterior urethra with a methyl blue, and hold for a few minutes. Thus the shreds and pus will be colored, and if any are not, you may be sure they come from behind the cut-off muscle.

We have now, as you have seen, ascertained the cause, pathological condition, and region or regions affected. How shall we cure, is the question. It is an undisputed fact, that after a certain time the gonococcus becomes dormant—moribund, so to speak; and especially is this marked when their field of cultivation is rendered uncultivatable. But let this field be fertilised by irritation or an excess of blood to the part, and they, as a person feeble from age, who by a stimulant is revived, also revive for a time, but very soon relapse into their former condition. Now, vice versa as with a person, if we render their field uninhabitable, remove all stimulation, and cause their lives to be unhappy, they must do one thing—namely, die. And they will die in quickness, according to the age of the case and depth to which they have penetrated. How can this be done? Not by injections of solutions which will keep up an irritation, medicines which will cause depletion for the time being, or by allowing the patient to use liquors or enjoy amusements which will cause congestion of the parts.

We have a very sensitive, long-continued, irritated mucous membrane, which to be brought to a normal condition must be treated as a refractory baby, that is, humored. For in this way only can we hope for any result.

You will notice the solutions which I use are many, many times

weaker than those often prescribed for the same condition. But if they are cautiously used in gradually increasing strength, there will be but one outcome,—urine cleaning, shreds diminishing from day to day, discharge stopped, case cured. I shall endeavor to make this so plain and untechnical, that the average practitioner will be able to treat successfully a large proportion of the cases that he meets in his daily or yearly practice. The armamentarium necessary is a microscope with a 1-12 oil em. objective and accessories ; an Ultzman syringe, capacity 6 oz.; semi-soft catheter, No. 15 F., with eye near end, a shield for same ; set of steel sounds, numbering from 20 to 30 F.; a steriliser and glycerine. Never use any oily substance to lubricate the catheter or sounds, as it will so coat the mucous membrane as to prevent the solution from coming in contact with the same. Now, if you want to be prepared to treat all cases which you will see, an electric light, endoscopic tubes, swabs, applicators, probes, long hypodermic needle and polypus forceps are absolutely necessary.

Let me treat a case for you, on paper. The manner is simply modification of the Ultzman with additions. History, six to eight weeks old; constant discharge, especially marked in the morning, or possibly only a morning drop. If you are going to apply the test already mentioned for posterior urethritis, do not allow the patient to pass urine. If not, have him pass it in two glasses. The first contains shreds and mucus, also the second, but not mucous plugs. It is not an absolute necessity at this time to examine for gonococcus, but it is good policy so to do. The first solution I call the zinc alu. carb., which consists of zinc sulphate, alum and acid carbolic, of each ½ dram in 6 oz., 2 drams distilled water. This being simply a modified formula of Ultzman's solution. Of this solution use ½ oz. to 7½ oz. distilled water for first irrigation. After having the canal perfectly clean by previous urination, a sterilised catheter should be passed as far as the cut-off muscle. Attach the syringe and expel air from catheter, after which push it through the cut-off, so the eye will rest just inside the same and immediately at beginning of the prostatic or posterior urethra. Gently push the piston forward, depositing about 3 oz. of the solution on the prostatic mucous membrane. This will readily flow backward into the bladder. Now withdraw catheter to anterior border of cut-off muscle, having patient hold meatus at intervals so as to distend canal, and bring the solution in contact with all folds. Deposit the remainder in the anterior

urethra. When the patient empties his bladder, the solution which you have previously left therein will, of course, flow out over the mucous membrane, thus again medicating it. On the second day use the same solution 6 drams to distilled water 7½ oz. Third day, 12 drams to 7½ oz. Fourth day, 12 drams to 4½ oz. Now this is as strong as this solution should be used.

If it has been used cautiously, adhering strictly to the above remarks as to passage of catheter and antisepsis, the case, if recent, should show marked improvement. The discharge should be nearly if not wholly stopped, and nothing remain but a slightly turbid urine with a few fine shreds floating therein. There is but one thing that can remove these shreds—pressure; but pressure must not be used until we have a perfectly clean urine, containing only shreds. Therefore, the mucous membrane must still receive attention.

At this stage the best, in my opinion the only remedy, for congestion or inflammation of the urinary membrane, is silver nitrate; but it must be used very weak until the surface over which it flows is almost normal, this being evident by the condition of the fluid which washes it.

With the same procedure as with the former solution, the first day I use a 1 to 12,000 solution; the second day, 1 to 10,000; the third day, 1 to 8,000; the fourth day, 1 to 6,000. Now by this time the urine is generally perfectly clear of any substance except the shreds, and you must resort to some measure to remove them. Shreds, in their early stage, generally speaking, consist of exfoliated epithelium, pus, mucus, gonococci and other cocci peculiar to pus-producing localities. They are due to an underlying inflammation which is constantly undergoing changes, throwing off the dead or dying upper layer, which is the epithelium; and as I have said before, this localised inflammation can only be removed by pressure. If the case is a very old one, it is well to use a urethrometer and search for stricture. Should none be found, the largest sound that will comfortably pass the meatus should be sterilized, lubricated with glycerine, and passed into the bladder, allowing it to remain for five minutes, after which remove, and with a catheter in same way as previously, use silver solution 1 to 5,000. To pass the sound oftener than every four or five days would cause too much irritation; but on the second day you can irrigate again, using solution 1 to 4,000.

The urine should receive close attention as to clearness, and I

am sure when you have the canal dilated to at least thirty, followed each time by an irrigation of silver, which should be gradually increased in strength from the last mentioned up to 1 to 1,000 or 1 to 800, you will find a urine containing only one or two very light-colored shreds, which will float, this indicating that they are composed chiefly of mucus and epithelium.

It is now the microscope should come into play, and these shreds thoroughly examined for gonococcus and pus ; and if found the dilation and irrigation should be continued. Or, as I shall later describe, the electro-endoscope may come in as a valuable adjunct.

Print these words on your brain in capital letters—as long as a shred contains gonococci and pus cells, that patient is a dangerous individual—dangerous not only to himself, but to every female, let it be wife or mistress, with whom he comes in contact sexually. On the other hand, if these shreds consist of mucus and epithelium, it shows a local spot of plastic infiltration, which is not a source of infection, but may contract and cause stricture in time to come.

Now, supposing that after six or eight treatments the urine has been clean both of mucus and shreds for say three days, there has been no discharge except one drop in the morning, this being pure pus and when examined is found to contain gonococci. For this condition there is usually but one cause, follicular involvement, where the gonococci are still living in luxury ; but so as not to overpopulate a fertile country, emigration takes place once in twenty-four hours. To cure this condition quickly there is but one remedy—find the enemy in his den and completely annihilate him. This can only be accomplished by means of the electric light and a tube which will enable you to find these follicles and destroy their inhabitants with a 10 or 15 per cent. solution of silver. Should one or several large shreds containing pus and epithelium persist after repeated use of full-sized sounds, it is very probable that you may find what is called granular spots. These also should be destroyed by local applications of silver.

General Treatment.—Should there be a pin hole or even small meatus, it should be divided up to 29 or 30 F. Strictures should be dilated after the inflammation around is subdued, this being evident by the clearness of the urine. With a profuse discharge, a weak solution of copper or zinc may be of benefit, but in my opinion is of very little. Injections do more harm than good, and I never

use them. Medicine internally is unnecessary, excepting in a debilitated patient. Iron or cod liver oil may have a pleasing effect in bracing up a lowered vitality. Syphilitics should always receive constitutional treatment, pushing it to its utmost. When the urine is excessively acid and examination shows either oxalate of lime or uric acid, a well-regulated diet for these conditions, with some anti-lithemics, paying especial attention to the intestinal canal and digestive system, is of all importance.

Conclusions.—First, 99 per cent. of patients can be cured. Second, examine the urine visually every time you see the patient. Third, soothe his delicate mucous membrane by very weak solutions, rather than irritate it by injections which, if used, certainly do. Fourth, never use an instrument except catheter, until the urine contains only shreds floating in a clear liquid. Fifth, never discharge a case as cured until the urine is the same as before he had the trouble, viz: clean. Or if one or two small shreds, examine carefully to see they contain no pus or gonococci. You may save some woman's tubes or ovaries, and unspeakable suffering. Sixth, don't use the electric light to impress the patient with your greatness. If not called for, it is a positive damage. Seventh, silver nitrate will not cure every case, but it will cure 96 per cent. and is the remedy par excellence. Eighth, adhere to cleanliness, and by this I mean sterilisation, for germs are the cause of inflammation, and the introduction of unclean catheters, sounds, and the like, will cause the same.

206 Franklin Street.

A PLEA FOR UTERINE CURETTAGE AS A ROUTINE MEASURE AFTER ABORTION BEFORE THE THIRD MONTH.[1]

By SIGMUND GOLDBERG, M. D., Buffalo, N. Y.

THE frequency with which abortion is followed by death, or a life of physical ailments, more or less severe, is my apology for the presentation of this paper. If I shall be successful in arousing a discussion in the line of prophylaxis as here outlined I shall feel that it has not been in vain. Though fatal results after abortion are rare, and when occurring due to sepsis rather than to hemorrhage, yet the fact remains that deaths do occur and that

1. Read before the section on gynecology and obstetrics of the Buffalo Academy of Medicine, April 27, 1897.

very fact merits the most profound consideration of any method which may have a tendency to lessen the number. Much of female suffering is directly traceable to this accident. The pathological interruption of pregnancy, as uterine and other pelvic diseases, especially subinvolution and consequent displacement, diseases of the endometrium and connective tissue result from abortion sterility as well. These diseases leave their traces indelibly marked upon the system of woman.

The accident of abortion, when fully inaugurated, can but seldom be interfered with. The question naturally arises, How shall it be treated to the best advantage and its sequelæ often so dire be avoided? The bad results are in the main due to the retention of parts of ovum or membranes, and I believe it impossible for the attendant always to be absolutely certain that the uterus is completely emptied. We cannot be so sure of a thoroughly retracted uterus after abortion in the early months as after labor at term. The uterus in its physiological post partem condition is better able to expel retained products of conception, be it ever so small, than a uterus in the pathological condition during or following abortion. The indications of a condition of the uterus which will almost surely lead to a long list of physical ailments on the part of the patient, will be hemorrhage or sepsis, or both. Now, is it right and always safe to wait for these symptoms before resorting to the only treatment which is admissible to its proper management? It has come to my knowledge only too often that physicians temporise with drugs, whose only effect is to contract the os uteri and thus defeat the very object it was intended to accomplish. It is my aim to advocate uterine curettage after every case as a routine measure without waiting for indications which make the operation imperative. Ever since the curette was first introduced by Recamier, in 1846, it has become exceedingly popular, both in its original and various modified forms. Many authorities pronounced the practice barbarous and unscientific—Chassaignac, Becquerel, Dubois, Scanzoni, Credé—but in vain, the curette maintained its fame and increased in popularity. But its greatest fame, in my humble opinion, will be attained only when it is generally used for the prevention of those very conditions which are now held to be the only indications for resort thereto. During the past four years it has been my custom to curette every uterus after abortion, no matter what the period of utero-gestation or the condition of the patient. I have never had cause to regret it, but, on the contrary, have felt that my

patient was safe. The operation is perfectly safe, and any physician competent to manage abortion should be able to do this minor procedure. I always use the Sims sharp curette. Many accidents have been attributed to it. Recamier himself met with three cases of death from perforation of the uterus by his curette; Dumarquay with two. Chamberlain, of New York, saw a case of hysterical tetanus therefrom; Peaslee, a death from collapse; Thomas, a narrow escape from the same cause; Parker, a case of peritonitis. But in these cases it was not the Sims sharp curette which was used, but the dangerous Recamier's curette. The Sims sharp curette should, of course, be handled with ordinary common sense in order not to cut too deeply and perhaps perforate the uterine wall, as happened to Spiegleberg and to Chroback while curetting a sarcoma of the uterine cavity. But this is not the condition of which we speak.

Mundé says that only unjustifiable brutal force could possibly perforate a normal uterine wall with a Sims curette. If, then, we understand curettage of the uterine cavity after abortion in every case to be a prophylactic measure against hemorrhage and sepsis, if properly performed, that is safe, there can be no just reason for waiting for the development of symptoms which may be the first indication that we have not done our full duty to our patients. The operation is easily performed, as after abortion there is always sufficient dilatation for its accomplishment. I almost always do it without an anesthetic and frequently without saying anything to the patient about it. The curette is the only instrument that will thoroughly clean out the cavity of the uterus. Many operators advocate the use of the finger for clearing the uterus, but I hold the hand is cramped and cannot work to the same advantage; besides, it is much more painful to the patient and I can endorse fully from my own experience what is said on this point by Dr. Alfred C. Carpenter, *Medical Record*, May 2, 1896, who, after referring to the use of the finger, says it is claimed the curette is dangerous, liable to puncture the fundus, that it cuts away too much uterine tissue and opens the uterine sinuses, allowing sources for infection. To be sure, a great deal of injury can be done with the curette. Indeed, I would never advocate the introduction of any instrument into such a uterus by an unskilled hand, but in the hand of one who knows how to use it, it can be used with just as much safety and to better advantage. Now, as a rule, I do inform the patient and family that it is necessary to clean out the uterus. If there exists absolute con-

fidence in the judgment and skill of the attendant, it will not be difficult to overcome any feeling of fear or prejudice that the patient or friends may entertain. Complications of a more or less serious nature are bound to follow if the uterus is not properly cleaned, which the patient will very readily believe to be the direct result of some little detail or other in the treatment.

The one thing indicated and the measure that will avoid all trouble is to clean out the organ and remove all elements of danger. If you state positively what line of action is required, and the family is not guided by your advice you remain true to your principles, guard against inuendoes and maintain an impregnable position if you withdraw from the case or place the responsibility on the family. A physician has no more right to wait for a rise of temperature or the development of a fungoid endometritis before removing decidual or placental tissue, than he has to wait for evidences of sepsis or sloughing before cleaning a lacerated or contused wound of foreign matter. It is clearly his duty to insure a surgically clean surface. In a brochure recently issued by Conley, of New York, he says the many cases of subinvolution, metritis, tubal trouble and inflammation about the uterus, not to speak of the violent acute attacks that have come under the writer's notice, has often led him to wonder if the average physician really appreciated the importance of thoroughly removing the products of conception. How many of the women who are today suffering from pelvic disease, and who date their trouble at the time of a premature birth, owe their condition to the ignorance or indifference of their attendant ? To the one who is in a position to know that with exercise of due care and skill the woman who is in a reasonably good condition can pass through an accident of this kind with but a nominal risk, what comfort is brought. And what satisfactory results are possible in all cases when the proper technique is followed out. This is a picture that is indeed a painful reproach to the skill and conscience of the profession.

That sepsis and not cold, or a too early getting up, or any of the many other reasons evolved in the mind of the attendant or the patient herself, is the direct cause of the immediate or remote ill results in most cases, is clear to the mind of every intelligent physician. I have records of forty-seven cases curetted during the four years past. One of this number I have curetted six times and others more than once. It seems to be the special privilege of the woman living in that section of our city in which

my lot is cast to treasure almost as tenderly as a fond mother does the most delicate of her offspring, a male catheter, which she brings into requisition after each period missed. This is a sufficient number in the practice of one man to testify to the uniform efficiency of the management advocated. How much more agreeable, as Conley says, is this state of things than any one of the many gruesome pictures that is liable to meet the physician's gaze when called to a patient who has been subjected to the so-called conservative plan of treatment. An alarming hemorrhage, due to a fungoid endometritis, subinvolution, with all its vague symptoms, misplacement, with its attending discomforts, purulent endometritis, cellulitis and pelvic abscess, tubal and ovarian inflammation, violent septic peritonitis, profound septic absorption, and metastatic deposits, are results that serve only to condemn any other mode of procedure than the one that is clearly indicated. An ounce of prevention, etc., appeals fully as strongly to the physician in attendance on a case of abortion as in any other professional relationship.

508 EAGLE STREET.

SALIVARY DIGESTION.[1]

BY EDWARD J. KIEPE, PH. G., M. D., Buffalo, N. Y.

SALIVA, the natural secretion of the mouth, is a colorless, odorless, tasteless, somewhat frothy liquid, normally of alkaline reaction; specific gravity, 1.002 to 1.006. It serves the purpose of aiding in acts of mastication, deglutition and digestion, the latter alone concerning us here. It contains particularly, among its other ingredients, an enzyme, one of the unorganised hydrolytic ferments called ptyalin, which has the power of converting boiled starch into dextrins and maltose, which can be readily detected a moment or two after mastication.

With a view of determining exactly how quickly this conversion takes place, and also how much of a given quantity of boiled starch an equal amount of saliva would succeed in converting into maltose, the following tables of experiments were conducted.

The conditions under which these experiments were conducted are as follows: Saliva was collected and filtered to free it of débris. Boiled starch was made by mixing one part of corn starch with 200 parts of water and boiling for five or six minutes. These

1. A graduating thesis, published by recommendation of the faculty Medical Department, University of Buffalo.

proportions of starch and water were taken mainly for the reason that they gave a fluid product which would readily flow through burettes and pipettes.

In each experiment the saliva and boiled starch were mixed in equal proportions and allowed to stand the length of time desired at a temperature of 45° C.; then tested with Fehling's solution.

TABLE No. 1.

One part of boiled starch + one part of saliva, tested immediately for maltose, showed .0025 per cent.

One part of boiled starch + one part of saliva, tested at the end of one minute for maltose, showed .008 per cent.

One part of boiled starch + one part of saliva, tested at the end of two minutes for maltose, showed .0175 per cent.

One part of boiled starch + one part of saliva, tested at the end of five minutes for maltose, showed .02 per cent.

One part of boiled starch + one part of saliva, tested at the end of ten minutes for maltose, showed .02 per cent.

One part of boiled starch + two parts of saliva, tested at the end of five minutes for maltose, showed .04 per cent.

The continuance of salivary digestion in the stomach is generally considered of minor importance, and such, perhaps, it may be, but nevertheless it is a question we are often called upon to decide. The facts that the four pancreatic ferments will not act unless the acid chyme from the stomach has first been rendered alkaline by the bile, and that pepsin will not act unless in an acid medium, has led many to believe that ptyalin will not act unless in an alkaline medium.

To ascertain how much maltose is formed in the stomach by the continuance of salivary digestion in the presence of an acid is no easy matter; for, to begin with, ptyalin itself is present in varying quantities, inasmuch as the percentages of maltose mentioned in Table No. 1 in each instance are averages of at least five trials. So, were we to determine the amount of maltose in the stomach after a meal of boiled starches, we would have to take into consideration the amount of ptyalin in the saliva, how much maltose had been formed in the mouth during mastication and during deglutition, and allowing that the gastric juice to have an inhibitory action on salivary digestion, how much maltose would have been formed before the gastric juice had penetrated the entire mass.

Imitating nature's way in first adding saliva to boiled starch

and then adding an acid solution of the strength of normal gastric juice also presents difficulties, for the conversion of boiled starch into maltose has already begun by the time an acid solution is added, a rather short period, to be sure, but percentages of maltose obtained would vary according to how quickly one succeeded in adding the acid solution.

Adding boiled starch to acid solutions of varying strengths, and both in the same and in different proportions, boiling, allowing to stand twenty-four hours and then testing for glucose, to see if any glucose had been formed by the action of the acid, and finding none at any time, led to the method of mixing first the boiled starch and acid solution of desired strength and then adding the saliva. This method gave constant result and percentages of maltose obtained one day would nearly correspond to the same figures obtained another day, providing, of course, that the ptyalin was present in the saliva in the same amount; so, whenever a quantity of saliva had been collected and filtered for use, a portion was always taken and tested whether ptyalin was present in normal amount. By normal amount is here meant, when equal parts of saliva and boiled starch are brought together and kept at a temperature of 45° C. for five minutes and then tested for maltose, there should be present about 2 per cent. This result was reached after subjecting the saliva of different healthy people to the same test, and also that of the experimenter during a period of three months.

Boiled starch whenever made was tested to see if any glucose had been formed in the process of hydration, for glucose and maltose both react to Fehling's test, which is the test used in these experiments for the detection of maltose.

In the following tables boiled starch and saliva were prepared as before mentioned. Hydrochloric acid was used for the reason that it is the acid present in normal gastric juice in quantities of from 2 to 4 parts per 1000.

In Table No. 2 a solution of hydrochloric acid of 2 parts in 1000 parts of water was used; in No 3, 4 to 1000; in No. 4, 6 to 1000; in No. 5, 8 to 1000; in No. 6, 10 to 1000; in No. 7, 12 to 1000; in No. 8, 14 to 1000; in No. 9, 16 to 1000; in No. 10, 18 to 1000; in No. 11, 20 to 1000; in No. 12, 22 to 1000; in No. 13, 24 to 1000.

The percentages of maltose in all the tables were obtained after the mixture had stood five minutes at a temperature of 45° C.

TABLE NO. 2.

2-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = .02 per cent. maltose; two parts Hcl. sol., = .01366 per cent. maltose; three parts, = .0082 per cent. maltose; four parts, = .006833 per cent. maltose; five parts, = .006307 per cent. maltose; six parts, = .003727 per cent. maltose; seven parts, = .003416 per cent. maltose; eight parts, = .002921 per cent. maltose; ten parts, = .002645 per cent. maltose; twelve parts, = .0012615 per cent. maltose; fourteen parts, = .001093 per cent. maltose; sixteen parts, = none.

Comparing the percentage obtained by mixing equal parts of acid, starch and saliva with the percentage in Table No. 1, in which there are equal parts of boiled starch and saliva alone, we will notice that the percentages are the same—namely, 2 per cent. But it is when the amount of acid solution is doubled, tripled, and the like, that we notice the steady decrease in maltose.

In the following Table, No. 3, the boiled starch and saliva were obtained and used in the same manner as before; the acid solution, however, is four parts in 1000.

TABLE NO. 3.

4-1000.

One part Hcl. sol. + one part boiled starch + one part saliva. = .02 per cent. maltose; two parts Hcl. sol., = .01366 per cent. maltose; three parts, = .008631 per cent. maltose; four parts, = .006833 per cent. maltose; five parts, = .005857 per cent. maltose; six parts, = .0041 per cent. maltose; seven parts, = .003416 per cent. maltose; eight parts, = .003037 per cent. maltose; ten parts, = .0025625 per cent. maltose; twelve parts, = .001281 per cent. maltose; fourteen parts, = .0010933 per cent. maltose; sixteen parts, = none.

Comparing this table with the preceding one, it will be seen that equal parts of acid sol., boiled starch and saliva yield the same percentage (2 per cent.) of maltose, and also that the decrease in amount of maltose is very nearly the same as in the preceding table, even though the acid solution is 4 in 1000.

In the following table the conditions are the same as in the preceding tables, except the acid solution, which has a strength of six parts in 1000.

TABLE NO. 4.

6-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = .0164 per cent. maltose; two parts, = .01025 per cent. maltose; three parts, = .006833 per cent. maltose; four parts, = .00328 per cent. maltose; five parts, = none.

In this table the percentage of maltose is slightly lowered, being in the first experiment .0164 per cent. the rest of the percentages show the same almost regular decrease as the amount of acid is increased.

In the following table the conditions were the same excepting the acid solution, which has a strength of 8 parts in 1000.

TABLE No. 5.

One part Hcl. sol. + one part boiled starch + one part saliva, =.0164 per cent. maltose; two parts, = .005125 per cent. maltose; three parts, = .002342 per cent. maltose; four parts, = none.

In this table, as in the preceding, equal parts of acid solution, boiled starch and saliva, give the same result, viz.: .0164 per cent. maltose. When the acid solution is doubled in amount the percentage of maltose shows a greater decrease than in the preceding table. Also in Table No. 4, five parts of acid stopped the conversion while in this Table (No. 5) four parts stop it.

In the following table, No. 6, the acid solution has a strength of ten parts in 1000.

TABLE No. 6.

10-1000.

One part, Hcl. sol. + one part boiled starch + one part saliva, = .00455 per cent. maltose; two parts, = .00205 per cent. maltose; three parts, = none.

In the following table (No. 7) the acid solution has a strength of twelve parts in 1000.

TABLE No. 7.

One part, Hcl. sol. + one part boiled starch + one part saliva. = .0041 per cent. maltose; two parts, = none.

In this table the decrease in percentage when equal parts are used is not so marked, while two parts of acid solution stop the conversion.

In the following table (No. 8) the acid solution has a strength of 14 parts in 1000.

TABLE No. 8.

One part, Hcl. sol. + one part boiled starch + one part saliva, = .003565 per cent. maltose; two parts, = none.

In the following table (No. 9) the acid solution has a strength of 16 parts in 1000.

TABLE No. 9.

One part, Hcl. sol. + one part boiled starch + one part saliva, = .003153 per cent. maltose; two parts, = none.

In the following table (No. 10) the acid solution has a strength of eighteen parts in 1000:

TABLE NO. 10.

18-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = .002645 per cent. maltose; two parts, = none.

In the following table (No. 11) the acid solution has a strength of twenty parts in 1000:

TABLE NO. 11.

20-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = .0021578 per cent. of maltose; two parts, = none.

In the following table (No. 12) the acid solution has a strength of twenty-two parts in 1000:

TABLE NO. 12.

22-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = .00164 per cent. maltose; two parts, = none.

In the following table (No. 13) the acid solution has a strength of twenty-four parts in 1000:

TABLE NO. 13.

24-1000.

One part Hcl. sol. + one part boiled starch + one part saliva = none maltose.

136 MONROE STREET.

Clinical Reports.

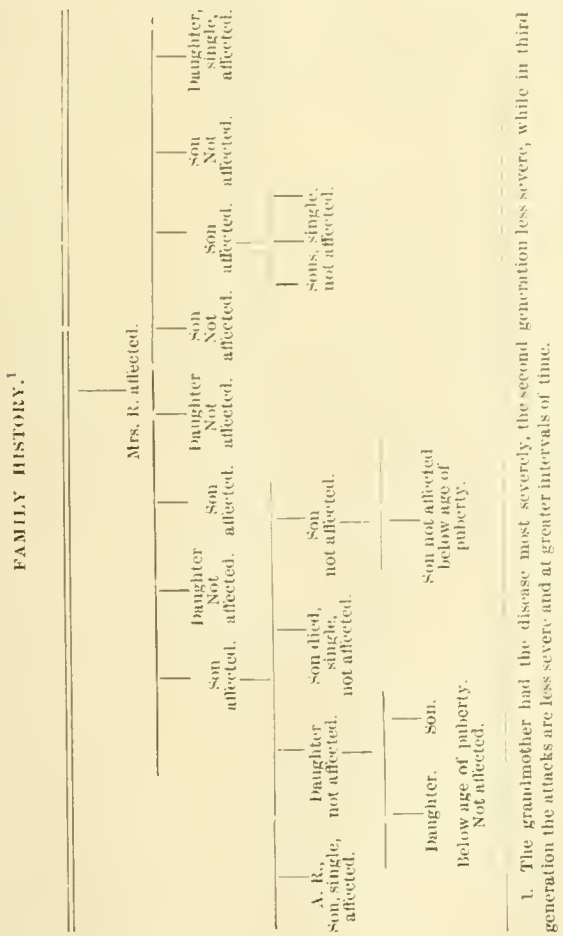
THOMSEN'S DISEASE—A FAMILY HISTORY.

BY J. C. CLEMESHA, M. D., L. R. C. P., Lond., M. R. C. S., England.

IN JANUARY, 1896, I was called upon to attend A. R., aged 33, suffering from an attack of hemoptysis. I found evidence of consolidation in the right apex, and the like, and the disease has been running its varying course ever since.

On going into his past history he mentioned being subject to the "family complaint" and on inquiry I learned the following: At different intervals during the last twenty years he had been subject to attacks of paroxysmal paralyses, at which times he would be unable to lift his arms or legs; in severe attacks his head could not be moved. He became afflicted at or about the age of thirteen (puberty) and tells me that all the members of his family, so troubled, were between the ages of thirteen and eighteen when the disease first showed itself.

Dampness and cold increases the liability to attacks, which, by experience, he could tell the onset of by a peculiar clumsiness or uselessness in the hands and feet. Often, by two or three hours' brisk walk, he could abort the oncoming paralysis and frequently in the middle of the night would he arise and go for a long tramp. If, during these walks, "to walk off an attack," he were to stumble and fall down he would be unable to rise without assistance, but when on his feet could go long distances without fatigue.



When the patient was younger these attacks used to come on every three or four weeks. Of late years three months or more will elapse and then the attack will not be nearly so severe or so

long in duration as in his younger days. If, an attack coming on during sleep, he happened to have his arms and legs in a state of flexion, on awakening he would be unable to extend his extremities and would have to call some one to put his legs straight.

In most of his attacks his lower extremities were alone affected and he tells how during some years' stay in Winnipeg he had one day walked off an oncoming attack, as he thought, and then went into a hotel to dine. After having dinner he attempted to arise from his chair, but found he was unable to do so. Calling a waiter he asked him to lift him upon his feet, which being done he walked out of the room without the slightest difficulty. In his father's case the head muscles are involved in addition to the extremities usually affected. The patient's description of his trouble is as follows :

I am generally taken at night, but if I get wet, sit around and become cold I am almost sure to have it come on. I feel a sort of uselessness in my arms and legs and by exercising myself I can generally work it off, but sometimes I allow it to get too firm a grip on me and then I am laid up a day, or perhaps two days. I have known myself to be so bad that I could move neither hand nor foot at 5.30 A. M., yet at 7.30 A. M. to be up and eating breakfast without any ill-effects.

In a recent number of the *Deutsche Zeitschrift für Nervenheilkunde*, Dr. Goldflam published an interesting and important article, which is abstracted in the *Neurologisches Centralblatt*. Five years ago he communicated some particulars of a family of eleven, who suffered from occasional complete paralysis of all four extremities. He has since had the opportunity of carefully and continuously observing two of the members of the family.

The condition affects the young people of the family and shows itself in complete flaccid paralysis, affecting the limbs and the trunk, and is characterised by loss or diminution of reflexes and of mechanical and electrical excitability of muscles. The muscles which are hypertrophied show but little strength, and the examination of freshly excised portions show that the fibers are unusually large, that the primitive bundles are wasted and that there is vacuolation in them. In his first communication Dr. Goldflam hazarded the guess that the disease perhaps depended upon some toxic substance acting upon the muscles and their nerve endings so as to influence them and disturb them. This hypothesis receives a certain measure of support in the fact that a ptomaine-like substance is present in the urine of the patients and that a fairly constant condition of leucocytosis is also present.

Possibly the poison exerts its influence on the muscles that have undergone some change in structure which renders them more susceptible to the influence of the substance. No doubt an analogy exists between such cases and those of Thomsen's disease.

I might, in concluding, remark that the above case seems to present characters that exist alike in Thomsen's disease and in Dr. Goldflam's cases.

329 FRANKLIN STREET, BUFFALO.

FOREIGN BODY IN THE LEFT BRONCHUS.

BY GEORGE A. HIMMELSBACH, M. D., Buffalo, N. Y.
Assistant attending physician Buffalo General Hospital, attending physician Erie County Hospital.

OCTOBER 2, 1896, Anna B., aged 21 years, consulted me, complaining of periodical attacks of dyspnea and violent paroxysms of coughing and wheezing. Her family history was clear as regards asthma, tuberculosis or any pulmonary disease. A careful and searching analysis for a cause was made, but with no success. The urine was scrutinised. I looked carefully for some external or internal reflex cause, but was still in the dark. A careful physical examination of the chest was made and much to my surprise I found the disturbance to be unilateral—located in the left lung, where all the physical signs of bronchitis and asthma were present. I was now more mystified than ever. I questioned her closely and learned that, six weeks before, she consulted a dentist and had five back teeth extracted. These were removed under the influence of gas. I tried to convince myself that the gas in this instance irritated the bronchial mucosa, yet this did not explain the one-sidedness of the malady.

I began to treat the case empirically. The emunctories were kept active. She was given small doses of potassium iodide and semi-weekly I gave her a half hour's treatment with the Underwood inspirator, consisting of inhalations of air raised to a high degree of temperature and medicated with eucalyptol, naphthaline, menthol, oil of tar and the like, and occasionally medicated heated oxygen was administered. This plan of treatment was kept up for some weeks. She would seem much improved and benefited at the time of treatment, but would invariably return with the report "no better," and physical examination of her chest from time to time showed no sign of improvement.

On December 18th she consulted me the last time and she now informs me that the week subsequent to this last treatment she was

worse than ever, saying that at times she would strangle and gasp for air; her cough was severe and sometimes she would raise blood; her dyspnea was most distressing.

On Tuesday, January 5, 1897, she had to do the family washing. She was obliged to ascend two flights of stairs to the attic to hang up the clothes for drying. While in the act of climbing the stairs, she was suddenly seized with a paroxysm of coughing and dyspnea almost to the point of suffocation. However, she managed to reach the top floor, where she was again seized with a paroxysm of coughing and suddenly, and with considerable force, a mass dropped from her mouth to the floor with a thud. Her curiosity was aroused and she examined the sputum, when to her surprise she found one of her molar teeth, which had been extracted fully six months before. She then examined the tooth more carefully and, singularly enough, she found a small pledget of cotton packed in a cavity of the tooth, which had never become detached or loosened. It seems for some time before extraction the dentist endeavored to save the tooth and had treated it several times with the view of filling it.

My patient experienced immediate relief the instant the foreign body was removed. Dyspnea never recurred and the bronchial cough lasted about one week, when finally it disappeared. I have since examined the lungs and can find no trace of her former trouble.

I think it is plainly evident from the foregoing history, that last August, while this girl was under the influence of the anesthetic, one of the teeth escaped the attention of the operator and found its way into the larynx, thence through the trachea to the left bronchus. Whether it entered the left bronchus or simply leaned a little more to that side at the division ofthe trachea I am unable to say. What surprises me most is, that my patient did not develop an infectious pneumonia or a pulmonary abscess, teeth being proverbially alive with organisms and particularly carious teeth.

In conclusion, I would like to call attention to the use of the Röntgen rays in obscure cases like the one here related. It is plain to all, that had this new and invaluable device been used six months before, the tooth and its exact location would have been found and my efforts directed towards relief of this foreign body. Besides, my patient's misery and wretchedness would have been materially curtailed.

137 W. Tupper Street.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Semi-annual Meeting, June 8, 1897.

REPORTED BY F. C. GRAM, M. D., Secretary.

THE semi-annual meeting of the Medical Society of the County of Erie was held on June 8, 1897, in the rooms of the Buffalo Academy of Medicine, 619 Main street. In the absence of a presiding officer the secretary called the meeting to order shortly after 10 o'clock A. M., and Dr. LUCIEN HOWE was elected temporary chairman.

The minutes of the annual meeting, as well as those of the special meetings held during the past six months, were adopted.

Dr. W. W. POTTER, who was the only one present from the committee on membership, stated that he had not been enabled to inspect the credentials of the applicants for membership to the society, and was therefore not prepared to make any report. Action was deferred until near the close of the meeting, when Dr. Potter stated that he had seen the credentials of Dr. J. Glen Ernest, and recommended his election to membership. The recommendation was unanimously adopted and the applications of the remaining candidates were held over until the next regular meeting.

Applications for membership were received from Drs. Katharine S. Munhall, Henry M. Reinhardt, Wm. Preiss, Renwick R. Ross, D. J. Constantine, Julius Ullman and Edward M. Dooley. Referred to the committee on membership.

Dr. J. B. COAKLEY, chairman of the board of censors, made a verbal report, in which he stated that the attention of the board had been directed to advertising circulars issued by two East Buffalo physicians. They were admonished to desist, which one of them did, while the other left the city.

Their attention also had been called to an alleged female practitioner who had repeatedly been the subject of judicial inquiries. She had treated a lady, and the case terminating fatally her husband had agreed to appear before the grand jury. The district attorney was consulted in regard to the matter and stated that his experience in such cases had not been very encouraging, but promised to look into the matter. The coroner reported to the district attorney that an autopsy revealed the fact that this lady died from fatty degen-

eration of the heart, and that a chemical examination of the medicine she had used did not reveal any poison. The case was therefore permitted to drop.

The third case which they investigated was that of a person who advertised treatment by electricity. He was informed that he practised in violation of the law and was advised to consult an attorney. He would not promise to desist and the matter was referred to the district attorney. The latter sent the chairman of the board a decision of the supreme court on a similar case, which was adverse to the board. The opinion was written by Justice Daniels, in the case of Smith vs. Lane, "When one may administer treatment to a sick person without a license and is entitled to compensation therefor."—Chapter 436 of 1874—to whom it is not applicable. Hun, 24.

Chapter 436 of 1874, declaring it to be a misdemeanor for any person to practise medicine or surgery who is not authorised so to do by a license or diploma from some chartered school, etc., does not apply to one who undertakes to cure diseases by manipulating the patient's body by rubbing, kneading and pressing it; and such person is entitled to recover a compensation agreed to be paid for such services, although he is not a graduate of a medical school and has no license permitting him to practise either medicine or surgery.

Dr. Coakley quoted the Century dictionary's definition as to the practice of medicine in contradiction to that of the learned justice. He also stated that the district attorney claims his hands are tied and cannot do anything under the present laws, as this decision would be generally accepted.

The report was accepted.

The secretary presented the resignation of Dr. Hopkins as president of the society, which was as follows:

No. 433 Franklin Street,

BUFFALO, January 13, 1897.

To DR. GRAM, Secretary of the Medical Society of the County of Erie.

Dear Doctor—Please refer to the by-laws and see who should act as president of the society for the coming year. In case the usual phrase fixing the term of the president's services provides that he shall serve for one year and until his successor is elected and qualified, then I should say the last president, Dr. Thompson, is still in office, otherwise the vice-president elected at the last meeting will have to act as chief. I would advise that you inform the proper person of his responsibility for the coming year, that the business of the society need not suffer. You will please present to the society, when you can, my thanks for the

compliment of an election and my sincere regrets at my inability to serve in this important position. Yours,

H. R. HOPKINS.

Dr. Hopkins' resignation was accepted and Dr. Dwyer moved that a committee be appointed to present nominations for the vacancy. The motion was adopted and the chair appointed Drs. Dwyer, Coakley and Brecht.

The secretary also presented the following letter from vice-president Trull:

WILLIAMSVILLE, N. Y., May 26, 1897.

Dear Dr. F. C. Gram—Yours of 24th inst. at hand and in reply will say, at the semi-annual meeting on the 8th of June, 1897, I would recommend an election of a vice-president, or in other words, an officer to fill my place, as it may not be possible for me to attend the meeting, and he shall be the presiding officer until the annual meeting, when a full board of presidents will be elected; and I will be excused as a candidate for either office, as I have no ambition for official positions.

Respectfully and sincerely yours,

H. P. TRULL.

This resignation was likewise accepted and the committee on nominations was instructed to nominate a vice-president also.

The committee reported the names of Dr. Lucien Howe, for president, and Dr. J. B. Coakley, for vice-president, to fill the unexpired terms.

The report was adopted and the secretary instructed to cast the ballot of the society for the nominees, which was done.

Dr. EDWARD CLARK stated that Dr. George H. McMichael, who had resigned some time ago, asked for reinstatement.

The president ruled that the application must be made through the membership committee.

Dr. EDWARD CLARK offered the following resolution and moved its adoption:

Resolved, That the Medical Society of the County of Erie be reincorporated under the laws of the state of New York, and that the president and secretary of this society are hereby instructed, and given full power, to carry this resolution into effect.

The resolution was adopted.

The secretary presented a letter from Mrs. S. E. Burnett, of Newark, N. J., sister of the late Dr. James B. Samo, in which she thanked Dr. Howe and other members of this society for their kindness to the deceased, as well as for the memorial adopted on

his death. She presented the society with Dr. Samo's diploma and certificate. The gift was accepted with thanks.

Dr. Benedict moved the appointment of a committee of three who shall ascertain how many practitioners use and favor the adoption of the metric system. Carried.

The president appointed Drs. Eli Long and Ring a business committee for the session.

Dr. Wm. C. Krauss read a paper on Some facts regarding brain anatomy and brain tumors, and gave a clinical analysis of sixteen cases of brain tumors and exhibited specimens.

Drs. F. Preiss and R. R. Ross led in a discussion on the application of the X-rays in medicine and surgery, exhibiting skiagraphs.

Both papers were discussed by members present.

A motion by Dr. Eli H. Long, calling for the appointment of a business committee to formulate plans for the next regular meeting, was adopted, and the president appointed Drs. E. H. Long, O'Brien and Dunham.

The society then adjourned.

Progress in Medical Science.

OPHTHALMOLOGY.

Conducted by ALVIN A. HUBBELL, M. D.
Professor of ophthalmology, Niagara University.

OBSTRUCTION OF THE LACHRYMAL DUCT IN NEW-BORN CHILDREN.

LANDOLT (*Annales de Gynéc. et d'Obstét.*, January, 1897,) finds that this condition is not rare and is often overlooked till much harm is done. The affection should be inspected whenever there appears to be conjunctivitis in one eye only a day or two after birth. The conjunctiva itself is not infrequently cured, so to speak, by appropriate lotions. The obstetrician, mistaking a complication or result for a primary disease, finds to his surprise that the eye continues to water, the lids becoming glued together, and a drop of pus often exudes from the inner canthus. This condition is yet more alarming in certain cases where no conjunctivitis has been observed. It looks like the beginning of purulent ophthalmia. Landolt lays down as a rule that obstinate unilateral lachrymation in a newborn child usually signifies obstruc-

tion of the tear duct. As an ophthalmic surgeon he advocates sounding of the duct with a fine probe; on no account should the canaliculus be slit up. Afterwards weak antiseptic lotions must be injected into the duct by means of an Auel's syringe; the infant must be turned on its face directly afterwards, lest any of the lotion be swallowed.—*British Medical Journal*, March 6, 1897.

THE GALVANIC CURRENT IN THE TREATMENT OF CORNEAL ULCERS.

PANSIER, (*Annal d' Oculist*, December, 1896,) while employing the galvanic current for its sedative action in inflammations and ulcers of the cornea, has noticed the remarkable effect it has in clearing up the resulting corneal opacities. A current of four or five milliampéres was applied daily for twenty minutes, or even twice a day for fifteen minutes each time, the positive pole being on the neck, the negative on the eyelid. This is continued until the ulcer has cicatrised, or until the scar tissue has become sufficiently transparent. The direct application of one electrode to the eye causes too much pain, even with a current of only two or three milliamperes, to be recommended when there is any corneal inflammation. The usual local treatment of corneal ulcers is carried on at the same time—namely, by galvano-cautery, atropine, and the like.—*British Medical Journal*, February 6, 1897.

OPHTHALMIA NEONATORUM.

CHARTRES (*Arch. Clin. de Bordeaux*, No. 12, December 12, 1896,) has made bacteriological examinations of the pus from twenty-six cases of ophthalmia neonatorum and has found very numerous pathogenic microbes. In 36 per cent. of the patients there were gonococci alone; in other instances there were Löffler's bacilli, 12 per cent.; micrococci, 12 per cent.; streptococci, 8 per cent., gonococci with streptococci, 8 per cent., and in yet other cases there were mixed germs. The worst instances were those in which there were streptococci either alone or associated with gonococci, or the bacilli of Löffler. Such cases ended in loss of vision, or were complicated by a fatally terminating broncho-pneumonia. When the gonococcus alone was found in the pus the prognosis was generally good, treatment resulting in cure. It is easy, therefore, to see that from the point of view of prognosis the bacteriological examination of the discharge at an early stage of the disease is of great importance. The treatment must

be energetic from the first, and it ought to be mixed. The author does not deal in this paper with the prevention of the disease, but he remarks parenthetically that while Credé's method is good, care during labor is better still. When the disease is present the first step must be the thorough washing of the eye with a solution of permanganate of potash, so as to reveal the state of the cornea. Chartres then cauterises with nitrate of silver on two or three successive days with frequent eye washings with a solution of boracic acid in the intervals.—(*British Med. Jour.*, February 13, 1897.)

RETROÖCULAR NEURITIS.

Mr. Marcus Gunn, (*British Medical Journal*, March 20, 1897,) in opening a discussion on this subject, characterised retroöcular neuritis as a distinct clinical group of cases and said that, owing to objective signs being not always present, reliance had to be placed on the subjective symptoms; hence the affection was liable to be considered a hysterical one. The action of the pupils, however, was a most important help in the diagnosis, as in hysterical amblyopia the action was unimpaired, while in retroöcular neuritis the pupil was inactive; or where the contraction on exposure to light was normal it was not maintained on continual exposure. Occasionally, one or both optic papillæ were involved, but the changes were never gross. In papillitis, due to intracranial disease, the visible changes preceded the loss of vision, whereas in retrobulbar neuritis failure of central vision was one of the earliest symptoms, the visible changes in the nerve occurring later.

During the stage of swelling in papillitis the conductivity of the nerve was unimpaired; it was only during subsidence, when the exudation was shrinking, that the nerve fibers were compressed, whereas in retroöcular neuritis the pressure on the nerve fibers within the pial sheath, especially where enclosed in the bony optic foramen, produced a very early effect, and was recovered from as soon as the pressure was diminished. One of the most prominent symptoms was the presence of acentral scotonea for colors and for light, indicating an affection of the macular fibers. This might be owing to the situation of these fibers in the nerve or to their great functional activity and consequent sensitiveness to pressure; or it might be due to the fact that the principal lymph current traversed the center of the nerve. The periphery of the visual field was sometimes contracted; if this were partial it would be a valuable sign in localising the lesion; in taking the visual field, care should

be exercised in using test objects of a standard size. There was pain on movement, a varying amount of amblyopia, or even where visual acuteness was not diminished, there was slowness in reading the test objects, which occasionally seemed to be moving; vision was worse in bright light, or after exhaustion or want of food. The sensation of movement of objects might be explained by a breaking up of the medullary sheath, leading to imperfect insulation of the axis cylinders, or by alternating activity of exhausted fibers. The local causes of the neuritis were orbital cellulitis, exposure to cold, general septicemia, periostitis of the optic foramen, extending from the adjacent sphenoidal cells, or the cause might be the local manifestation of a general disease, such as syphilis, rheumatism, or gout, the latter having a tendency to recur. Finally, the optic nerves might be affected as part of the central nervous system. Retrobulbar neuritis had also affinities with toxic affections of the nerve.

THE TREATMENT OF LACHRYMAL OBSTRUCTIONS BY STYLES.

Mr. R. Shalders Miller (*British Medical Journal*, March 13, 1897,) says that since 1877, when he first became a clinical assistant at Moorfields, it has been his habit to treat all organic strictures of the lachrymal duct—that is, all parts of the outfall from the lower *punctum lachrymale* to the exit in the inferior turbinate sinus of the nose—by means of styles, in most cases permanently retained. Except for temporary wear, they should be made of pure platinum wire, about 25 gauge, and he always makes them himself for each individual case. The shape, direction and length of the nasal duct being variable, this special adaptation is the key to success in the use of styles, which consist of a vertical stem, with a short arm, bent at or about a right angle to the stem. Usually this arm is made double by recurving the wire back to the stem, so that the arm consists of two thicknesses of wire, parallel and quite close together, the recurved part lying vertically beneath the other. In this way the slit in the edge of the lid is just filled up, but no metal is visible unless the lid be everted. Sometimes the furrow produced by slitting up the canaliculus is very shallow; then the arm of the style is single.

The length of the arm should be such that it completely, but easily fills the slit-up canaliculus; it must not be too tight. The stem should always be long enough to project through the lower opening of the *ductus ad nasum* in the inferior nasal sinus. The

measure can be readily taken by passing a probe. The practical effect of a style in maintaining the potency of the lachrymal exit depends upon the lateral movements of the lower lid, imparted by those long, straight, muscular fibers which take origin at the tendo palpebrarum, and run horizontally outwards to the surface of the molar bone, and are anatomically quite separable from the oval bundles of the orbicularis proper. The tubular styles of the instrument makers are worse than useless; they soon become choked with mucus and dust. Also, in the case of the grooved styles, the necessarily thin edges of the furrow cause irritation and the production of a granulation which stops the way. The stem of a style should not be straight except in the case of a very short duct, but somewhat concave outwards.

The lower opening of the duct may be obstructed by an excessively incurved lower turbinate, but even this is scarcely an excuse for turbinotomy. He has found no difficulty in pushing a probe through the turbinate bone, and a style, made long, follows. Some of his patients have worn a platinum style for eight or more years without its ever having been removed from the moment of its first introduction.

In every case of lachrymal abscess a style ought to be used for a time at least; in most instances it is needed permanently, but a temporary one must be first inserted of a form modified according to the amount of swelling in the part. Such style may be of lead or silver, and several different forms and sizes are sometimes desirable in succession, to suit the changing size and shape of the lid and canthus. He has found it necessary to make an eyed probe of lead, pass it through the duct and anterior nares, and by means of a thread attached pull a fine drainage-tube through, and thus restore a lachrymal passage that had been obliterated by an encysted abscess for sixteen years. A platinum style was afterwards worn with a perfect result.

GUNSHOT WOUND OF THE EYE.

Mr. Brudenell Carter (*British Medical Journal*, January 16, 1897,) described this case: The patient was a boy, aged 14, who received a charge of snipe shot in his face from a gun, the muzzle of which was only three yards away, on December 14, 1895. Most of the charge entered the mouth, and the jaws were much injured, but two pellets passed through the left lower lid and entered the eye, piercing the sclera below the cornea, one just to the nasal side

of the vertical meridian, the other on the same horizontal line and four or five millimeters nearer the nose. Mr. Carter saw the case two days after the accident, and after dilating the pupil was able to see that the retina had been wounded. An expectant treatment was pursued and the eye recovered without inflammation or trouble of any sort. By February 4, 1896, all the blood effused within the eye had been absorbed, and it was then seen that the retina and choroid, having been wounded below the optic disc, had disappeared from an extensive region, probably by retraction, leaving the internal surface of the sclera exposed to view, while on the temporal margin of the gap thus occasioned two pellets of shots were lodged and encapsuled, one slightly above the other, producing elevations which were about a millimeter above the general level of the fundus. Central vision was now equal to $\frac{10}{12}$ of the normal, and the gap in the upper part of the field was too remote from the fixing point to occasion any inconvenience.

RECURRENT ORBITO-PALPEBRAL HEMATOMA IN A HEMOPHILIOUS SUBJECT.

Dr. Valude (*The Medical Week*, February 19, 1897,) says: Spontaneous hematoma of the orbit and especially of the eyelids is very rare, not over seven or eight cases being known in medical literature. The majority of these patients were arterioselerotic, or women with vicarious menstruation. Professor Panas, in one case in a child, has attributed an orbital hematoma to digestive disturbances and marked dilation of the stomach. Zehender has met with a case in a child in which hemophilia existed.

In a woman whom I have recently had under treatment for hematoma of the upper eyelid, hemophilia is also the cause of the mischief. The patient in fact bled on the slightest provocation, simply rubbing the skin with a rather coarse cloth being sufficient to cause an emission of blood. Moreover, the blood was found on examination by Dr. Chauffard to be very slow in coagulating, no signs of coagulation being observed until a quarter of an hour had elapsed. The organised elements of the blood were both absolutely and relatively normal as to number. The existence of hemophilia was, therefore, unquestionable. This was the condition when the patient, without the slightest traumatism, developed severe pain in the right orbit, which sometimes led to nausea and vomiting. Simultaneously with this supervened swelling of region, a fluctuating bluish projection made its appearance beneath the

upper eyelid, near the supero-internal angle of the orbit. Tapping of this collection gave issue to somewhat thick blood, after which the pain ceased. The swelling and ecchymosis of the eyelid in the neighborhood disappeared after the application of a tight bandage.

A month later the same phenomena were reproduced, but in an attenuated form and were dispelled by simple compression. Since then a bluish and somewhat tender swelling has formed from time to time, but disappears within two or three days on application of a tight bandage.

GONORRHEAL OPHTHALMIA—REPORT OF A CASE TREATED WITH ARGONIN.

Frank Trester Smith (*Journal American Med. Asso.*, April 10, 1897,) reports as follows: C. D. R., male, aged 33. First seen November 25, 1896. Two weeks before, right eye became sore, for which he was treated by his family physician. It was extremely painful until two days before, when something seemed to give way and water gushed from between the lids, after which it became easier.

There was an abundant purulent discharge. The cornea was not clear at any point, but had a fleshy appearance and bulged from the general curvature of the eyeball (total staphyloma).

The man lived at some distance in the country and failed to attend regularly, coming only once or twice a week. For two weeks he was treated in the usual way with boracic acid, bichloride and nitrate of silver with very little effect on the discharge, which was abundant from the time first seen. A microscopic examination by Dr. E. C. Anderson, chief of the Microscopic Laboratory of the Chattanooga Medical College, showed the presence of gonococci in abundance. The patient had gonorrhea.

Thinking this a favorable case to test argonin, as the eye was hopelessly lost, a 5 per cent. solution was instilled into the eye. The application caused no pain and a solution was given to the patient for use at home. Four days later he reported that the discharge had almost entirely ceased after the first use of the argonin. He had kept samples of the discharge, which were preserved on cotton swabs made by wrapping pledgets of cotton on toothpicks. These were sealed in envelopes as soon as obtained. An examination of these failed to show a single gonococcus. A sample of the discharge taken direct from the inside of the lid was found to contain a few, very few gonococci.

The argonin was continued. A few days later the eye again became very painful. The tension was increased to plus 1 and the staphyloma was larger. The ball was incised and the clear lens escaped. There was no pus inside the eye. There was no further pain and the patient ceased his visits owing to sickness in his family. One of his neighbors reported that he had no further trouble. The fellow eye was unaffected during the whole of the treatment.

This case seems to indicate that argonin can be used safely in the eye; that it is less irritating than nitrate of silver and from its wonderful effect on the discharge and development of the gonococci it appears to be the ideal remedy in purulent ophthalmia. Further tests will demonstrate its true value.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE CLINICAL FEATURES OF CHRONIC INTERSTITIAL NEPHRITIS AND CHRONIC PARENCHYMATOUS NEPHRITIS, DIFFERENTIALLY CONSIDERED.

PURDY (*The Medical Record*) says chronic interstitial nephritis, sometimes called renal cirrhosis or granular atrophy of the kidney, pursues a chronic course from the beginning. At the beginning there are no active or pronounced symptoms. It occurs under two forms, hereditary and acquired. The hereditary form may appear in subjects of any physical type and at variable age, while the acquired type usually appears at middle or advanced ages in robust subjects, who live inactive lives and who gratify inordinate appetites upon animal food. Its earlier symptoms are transient, recurrent headaches and a varying degree of vertigo. The pulse is full, hard and incompressible, and often slower than normal. The normal cardiac sound is accentuated and the sphygmograph shows tense radial pulse. The cardiac apex approaches the left nipple line and, as the disease advances, may extend beyond it. Obstinate epistaxis and frequent urination are frequently, almost invariably, present. The quantity of urine is progressively increased at night and diminished by day, until the later stages, when this condition is reversed. There are usually traces of albumin present, but not always. Cases have been reported to pass through uremic convulsions without the presence of albumin and survive for several years.

Dr. Purdy gathered and reported 191 cases of Bright's disease, some of them having been treated in hospitals in Great Britain and in this country, in which the diagnosis was only made after the post mortem (*Medical Journal and Examiner*, May, 1885). Fifteen to 20 per cent. of the cases of chronic interstitial nephritis do not show albumin in the urine at times and often for long periods of time, regardless of the stage of the disease. Such cases baffle diagnosis and confound life insurance associations.

The urine, however, from the beginning contains casts that are distinctive in character, being narrow, slender and long, showing that they are found in the smaller uriniferous tubes beyond Henley's loops, beneath the capsules of the kidney, the seat of the primary anatomical changes of this disease. These casts are few in number, hyaline or transparent, and require careful shading and delicate focusing to bring them into view. There is little urinary sediment, the chlorides are normal in quantity and the phosphates reduced. The urea may be reduced slightly or it may remain normal in quantity.

After the disease has progressed for a number of years the symptoms become more pronounced. Headache and vertigo are more severe and frequent; dyspnea and palpitation of the heart appear; the skin becomes cyanotic and the arteries more prominent and tortuous; atheroma and increased pulse tension are manifested; appetite and digestion are impaired, associated with diarrhea and increasing dyspnea. Urination at night is more frequent and apoplectic symptoms are not uncommon. Changes in the retina now appear, more or less impairing vision, and dropsy remains absent.

If the cardio-vascular changes are prominent, albumin is plainly present. The small hyaline casts increase in number and the small-sized dark granular casts now begin to appear; the large broad ones are not found. The urinary sediment is small in quantity.

In the late stages of chronic interstitial nephritis there are two distinct types. One is characterised by marked cardio-vascular manifestations, which obscure and overshadow the causative renal disease; in the other these changes are slight or totally absent. The cardiac may outrun the renal lesion and terminate life years before the kidney lesion would otherwise cause death.

As the disease advances, the symptoms become more aggravated, viz.: cyanosis, dyspnea, atheroma, dropsy, apnea, cough and the like. The pulse becomes weak, compressible and even dicratic.

The tongue becomes coated with brownish fur and the breath laden with uric odor. The urine decreases in quantity and albumin becomes a persistent and increasing factor ; finally, drowsiness, convulsions, Cheyne-Stokes respiration, coma and death ends the scene.

In the second form of chronic interstitial nephritis, the cardio-vascular changes are slight or absent, while there is progressive deterioration of the general health, strength and mental faculties, with headaches, forebodings and childish notions. There is general bodily and mental deterioration, without the manifestations of pronounced active disease. There is no cough, dyspnea or dropsy, but rheumatic and gouty symptoms are usually present, vision fails and the oculist is often the first to diagnosticate the disease. The urine is quite normal in quantity and the few hyaline casts are found only after diligent search. These are the latent cases, lasting often ten to fifteen years and diagnosticated as " renal insufficiency."

Chronic parenchymatous, tubal or diffuse nephritis is essentially different in all its more prominent clinical features. Invalidism is marked from the beginning. Anemia, dropsy, pallor and puffiness of the features and the extremities are early symptoms, calling attention to the seat of the disease. Debility, weakness, impaired appetite and dropsy appear early. Dropsy begins usually in the feet, extends through the cellular connective tissue and involves one or more of the great serous cavities. Visual disorders are comparatively rare. The urine is cloudy and deposits a large amount of sediment. Albumin is always present, frequently in large bulk. The urinary sediment is made up of epithelium, pus, blood, the products of cellular degeneration and numerous casts. The casts are of all varieties, but most of them are large or nearly straight, indicating that they were formed in the middle zone of the cortex or in the straight tubes of the pyramids of Malpighi. In the very chronic cases fatty casts are found. In typical and unmixed cases the differential diagnosis of these different forms of nephritis is easily made.

The differential clinical features of these two diseases :

Chronic interstitial nephritis occurs in robust health and about middle life.	Chronic parenchymatous nephritis occurs in children and young adults impaired in health.
Patient apparently healthy in the early course of this malady.	Health impaired from the beginning, with debility, anemia and dropsy as prominent features.

Cardio-vascular changes begin early.	These changes are limited to the later stages of the disease.
Dropsy, if present, only appears in the later stages and is limited to the lower extremities and abdomen.	Dropsy is an early and prominent manifestation and continues throughout.
Cyanosis, dyspnea, cough, vertigo, increased pulse tension and nocturnal micturition are common. Uremia and visual disorders are much more common.	Absent or limited to the last stages.
Albumin always small in quantity, a mere trace and sometimes absent.	Always present and in large amounts.
Urinary sediment is slight in quantity, consisting of hyaline casts and some morphological products.	Sediment abundant, rich in casts and morphological products. The casts are large and present the features of active degenerative changes.

CONTRAINDICATIONS TO THE EMPLOYMENT OF SODIUM SALICYLATE IN RHEUMATISM.

M. Jaccound (*Journal de Medecine et de Chirurgie Pratiques*, February 10, 1897,) states that salicylate of sodium in acute articular rheumatism does not cure the visceral localisation of this malady; that it does not palliate the manifestations of visceral involvement, but that it may even favor their production. This drug should be suspended if delirium is present, whether due to the malady or arising from any other cause.

Especially should this remedy be discontinued in case of cardio-pulmonary localisation, as it has a very depressing action on the heart. The salicylate acts on the pains and on the fever, but has no modifying action upon the visceral localisations. This remedy will hasten, if not promote myocarditis.

Statistics show that these lesions are not cured or even prevented by the salicylate treatment.—*N. Y. Med. Journal*, April 3, 1897.

TREATMENT OF GONORRHEA WITH SILVER SALTS.

Kreissel, of Chicago, (*Chicago Medical Reporter*, February, 1897,) says: Several years ago Schaffer (Breslau) conducted a

series of experiments for the purpose of ascertaining in what way and to what degree the usual antigonorrheal remedies affected the gonococci in regard to checking their development and impairing the culture medium.

No germs developed on the surface of the serum-agar after treatment with a 1 to 2,000 solution of nitrate of silver. The germs developed abundantly on the argentamine-serum-agar 1 part to 1000. The argentamine forms insoluble compounds with organic substances. Argonin, 15 to 20,000 solution, caused suspension of development (Meyer) in fifteen minutes. Sulpho-carbolate of zinc and alumnol were ineffective. Four per cent. solution of ichthyol after ten minutes' contact with the culture medium was inefficient.

Argentamine and nitrate of silver are powerful germicides, but are irritants to the living tissues. Irritation, by increasing inflammation, promotes the development of gonococci. Argonin, being non-irritating, is the very remedy for the early stages of acute gonorrhea. The earlier it is used the better the result. Argonin not only does not cause irritation it relieves chordee and smarting within forty-eight hours and changes the secretion to a scanty seromucous discharge within five days. Five to 7 per cent. injections should be used once each day for from twelve to eighteen days. The catarrh and hypersecretion following the disappearance of the gonococci should be treated with astringents, irrigation and the like.

Tests of cure—namely, either venery, the use of liberal amounts of beer, the passage of the olive-tipped bougie or deep injections of silver nitrate were applied in selected cases.

SECTION OF THE VAS DEFERENS.

Navé Jasserand (*Lyon Medical Journal*) gives the results carefully observed in forty-six vasectomies. He alleges that section of the vas rarely affects the size of the prostate, but it does relieve vesico-prostatic congestion and consequent urinary retention, spasm and pain. Reduction of the size of the prostate is not essential for the relief of these symptoms.

If the retention has not been of too long standing, urination becomes entirely normal, and in all cases pain and strangury are relieved. The operation produces sterility without destruction of the virile function. The immediate unfavorable results, retention,

shock and mental disturbance are transitory and not severe. The operation is so slight that all patients bear it easily and are not confined to the bed. It does not contraindicate any subsequent surgical procedure. It is especially indicated in the middle period of prostatism, when congestion is inciting cystitis, hematuria and retention. It diminishes pain in all stages of prostatic abnormalities.—*Bulletin Med.*, November 22, 1896.

Reginald Harrison, of London, and others report favorable results following vasectomy. Herhold, in Germany, reports forty-four cases in which thirty were cured and none died. Drézigné has performed the operation in twenty-two cases with notable improvement in every case. Operation on one side, only, produced no effects.

Seventy-five cases of vasectomy are reported with a high degree of success and no danger. Carlier reports seven vasectomies and states that he believes that favorable results are due to the methodical after-treatment. Loumeau reports four vasectomies and alleges that the only result was a cessation of frequent recurrence of epididymitis in two of these cases.

The abstractor herewith adds four cases of vasectomy, three of which were performed in the service of Dr. B. H. Daggett at the Erie County Hospital, and the results fully confirm the reports made by Jasserand. All the urinary disturbances were relieved, except in one case, and he was an old and feeble man, and even in this case all the urinary symptoms resulting from senile hypertrophy were relieved, excepting that he was required to urinate three times during the night. Pain, strangury and turbid urine disappeared.

PEDIATRICS.

Reported by MAUD J. FRYE, M. D.,
Clinical instructor in diseases of children, Medical Department, University of Buffalo.

HOSPITALISM IN INFANTS.

HENRY D. CHAPIN, (*Archives of Pediatrics*, May, 1897,) writing after twelve years of hospital experience, says: Owing to their susceptibility to hospitalism infants should be placed in a hospital only under exceptional circumstances, as, for instance, entire inability to secure proper care at home. Only cases of acute illness should be received and these should be discharged immediately on recovery, even if the latter is only partial.

A speedy or satisfactory convalescence is impossible for an infant in a hospital. As a rule, two weeks should be the limit of a young infant's stay. Hospitalism shows itself earlier the younger the infant. One of the first indications is a progressive loss of weight not dependent on the original disease; this may take place when the infant is apparently digesting a suitable artificial food. Accompanying the atrophy there is marked hydremia, dryness of the skin, and wearing off of the hair from the occiput. Hypostatic pneumonia is very apt to develop and, being very insidious, may first be discovered at the autopsy. Female children are apt to develop a vaginitis from the lack of tone of all mucous membranes occurring in hospitalism. Adding to the danger of hospitalism the risks to which the little patients are subjected from outbreaks of contagious diseases, extreme care should be exercised when considering the subject of a hospital for babies. The hygienic conditions must be of the best, the nursing of a very high grade, and a most scrupulous and painstaking oversight exercised. The first signs of hospitalism should be the indication for discharge. If it gets beyond a certain point, no change of food or environment will benefit the infant.

OPIUM IN PEDIATRIC PRACTICE.

In prescribing opium (abstract from editorials in *Archives of Pediatrics*, May, 1897,) for both children and adults, its varied and contradictory actions should never be forgotten. These actions may be briefly summarised as follows: (1) Opium stimulates the heart; (2) weakens the respiration by acting upon the respiratory center of the medulla; (3) blunts the sensory nerves; (4) decreases the secretion of the digestive tract, the bronchi, and all mucous surfaces, the liver and various glands; (5) increases, often, the secretion of the skin and kidneys; (6) decreases the action of the unstriped muscle fiber, thus checking peristalsis and spasm of the intestine, spasm of ducts, and action of the bronchi and bladder.

In the diarrheal diseases of children it is contraindicated: (1) in the first stages of acute diarrhea, before the intestinal canal has been freed from decomposing matter; (2) when the passages are infrequent and of bad odor; (3) when there is a high temperature or cerebral symptoms are present; (4) when its use is followed by elevation of temperature or the passages become more offensive—symptoms which indicate toxic infection from putrefying intestinal contents.

It is indicated in diarrheal diseases: (1) when the passages are frequent, with pain; (2) when the passages are large and watery; (3) in dysenteric diarrhea, together with castor oil or a saline; (4) in late stages, with small, frequent, nagging passages; (5) when the passages consist largely of undigested food, and the bowels act as soon as food is taken into the stomach, the dose should be as small as possible, sufficient being given to relieve pain and check peristalsis. It should be given alone, at intervals, sufficient to allow the effect of one dose to partially subside before another is given. In respiratory diseases, in general terms, it may be said that the more deeply the respiratory tract is involved, the more cautiously should opium be administered. In the dry, painful cough of pleurisy it may be given more freely than in almost any other condition. In the early, dry stage of bronchitis it may be given in moderate doses, as well as for the harassing cough of the later stages, if the respiration is free and the circulation is good. One of the most efficient means of relieving spasmodic croup is a full dose of opium combined with ipecac.

THERAPEUTIC VALUE OF A SUDDEN CHANGE OF DIET.

Angel Money (*Pediatrics*, May 15, 1897,) writes editorially on this topic. He says: The class of disease in which this mode of therapeutics finds most application is usually chronic, frequently neurotic, and not uncommonly affections of the mucous membranes. Thread-worms are often successfully treated by a complete reversal in the mode of feeding. Sometimes a chronic bronchial catarrh will yield to a similarly directed treatment. Asthmatic attacks are sometimes made to alter their rhythm and occasionally to cease altogether for long periods. Cases of nocturnal incontinence and enurises may be checked by a profound alteration of the dietary. The sudden withdrawal of all saccharine and starchy stuffs from the food and its replacement by pure proteids with salts, extractives and water is a very good mode of treating a dilated stomach or flatulent dyspepsia without much distension of this organ. Sweetbreads, lambs' trotters, tripe, calf's head and feet, isinglass and gelatine blanc-mange, unsweetened jellies, vegetable marrow, well-cooked and well-drained, cucumbers, similarly treated and freed from skins and seeds, lettuce, thoroughly boiled and freed from all excess of moisture, very young green peas, very tender French beans—all these may be utilised. If the dietetic treatment is not to last longer than a week, gluten bread, almond biscuits

and soya nuts make other provisions comparatively free from fermenting factors. Most of the therapeutic value of a complete change of diet is to be obtained by its adoption for short periods only.

THE CHEMICAL EXAMINATION OF HUMAN BREAST MILK.

ADRIANCE (Vanderpool and John S., *Archives of Pediatrics*, February, 1897,) summarise as follows, as the result of the examination of 200 cases. To secure healthy milk, a mother should have: (1) A good constitution; (2) healthy environment; (3) simple, nutritious diet with enough albuminous food; (4) regular exercise in the open air.

(1) Excessive fats or proteids may cause gastro-intestinal symptoms in the nursing infant; (2) excessive fats may be reduced by diminishing the nitrogenous elements in the mother's diet; (3) excessive proteids may be reduced by the proper amount of exercise; (4) excessive proteids are especially apt to cause gastro-intestinal symptoms during the colostrum period; (5) the proteids, being higher during the colostrum period of premature confinement, present dangers to the untimely-born infant; (6) deterioration in human milk is marked by a reduction in the proteids and total solids, or in the proteids alone; (7) this deterioration takes place normally during the later months of lactation, and unless proper additions are made to the infant's diet, is accompanied by a loss of weight or a gain below the normal standard; (8) when this deterioration occurs earlier, it may be the forerunner of the cessation of lactation, or well-directed treatment may improve the condition of the milk.

OBSTETRICS, GYNECOLOGY AND PELVIC SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y., Examiner in obstetrics, New York State Medical Examining and Licensing Board.

PUERPERAL ECLAMPSIA.

DR. CHARLES M. ELLIS, of Elkton, Maryland, gave the indications (*Maryland Med. Jour.*) for the necessity of artificial delivery. He called special attention to the great danger of the convulsions of pregnancy before term. His experience included eight cases, occurring at different stages of pregnancy, and showed clearly that when a convulsion occurs before term,

unless it is of systemic origin, immediate delivery is imperative, without regard to the presence or absence of uterine contractions or the condition of the os as to dilatation. If the convulsions begin early, the uterus should be emptied by the most expeditious method, and all medicinal treatment should be secondary to this one great object. This is necessary for the reason that the percentage of fatalities from eclampsia is fully 50 per cent.

This high death-rate is greatly exceeded when the delivery is not accomplished, or if it is delayed until several convulsions have occurred, or until uterine contraction and dilatation have supervened.

Of the eight cases seen by the author, five died and three recovered. Of the five that died, premature delivery was effected, one on the sixth day after the initial convulsion, one forty-eight hours after, one eighteen hours after, three others having followed, and the patient being moribund at the time, and one lay in convulsions three days without any attempt at delivery. The experience gained from these eight cases would certainly justify premature delivery.

Dr. Ellis had never seen a death occur before delivery after the operation had been initiated, and he believed the uterus should be evacuated immediately after the first convulsion. When albumen appears in the urine, the more imminent is the danger of eclampsia, and, if this accident is threatened, it may be necessary for the attending physician to hasten delivery without waiting for the convulsive seizure. He denounced the indiscriminate use of morphia hypodermically in cases like these.

THE SERUM TREATMENT OF PUERPERAL FEVER.

Gaulard (*Presse Medicale—Fort Wayne Med. Magazine*,) reports two cases of puerperal fever treated by serum. A rickety woman with a contracted pelvis had a protracted labor. The case was one of false presentation. The perineum was torn to the anus, but sutured at once. One week after delivery the temperature rose to 105° F., and remained at that height for three or four days. Gaulard saw her four days later, when the pulse was 140 and irregular, and diarrhea present. The perineal wound was discharging pus and on the vagina there was some sloughs. The uterus was curetted, nothing, however, of importance coming away. Subsequently the uterus was packed with iodoform gauze and the perineum resutured. The next day the temperature fell to 102.7° F., but on the second

day it rose again, and her general condition became serious. At this time 10 c. c. of Marmorek's antistreptococcic serum were injected into the abdominal wall. The temperature fell slightly on the following day, and a second injection of two cubic centimeters was given. From this time the temperature fell steadily and the patient made a speedy recovery.

The second case was also a rickety woman. It was her fourth pregnancy. The first labor was natural: in the two others the delivery was effected by forceps. The antero-posterior diameter of the pelvis was three and three-quarter inches. As an unsuccessful attempt had been made outside of the hospital to apply the forceps. a basiotripsy was performed, delivery effected, and a douche of 1-400 bichloride of mercury was given. The temperature rose rapidly and two days after delivery it had risen to 104° F. The uterus was swabbed out with creosoted glycerine, some putrid fragments coming away, and plugged with iodoform gauze. On the fourth day 10 c. c. of antistreptococcic serum were injected, and repeated on the fifth and sixth days. After the third injection the temperature fell to 102.9° F. Another injection was now given, and the temperature fell to 101.5° F., reaching the normal on the eleventh day after delivery. While the temperature was falling, she was seized with bilious vomiting and meteorism, the pulse remaining as before, about 120. The vomiting became uncontrollable, she became comatose, and died on the thirteenth day. Goulard believes that the serum was the cause of the vomiting. He fears that too much serum was injected, for at the autopsy there was no sign of suppuration or peritonitis. The question of maximum dose of serum has yet to be determined. The serum does not do away with the necessity of using the curette, but if the germs have already entered the blood, it may be employed against them and their toxins.

OBJECTIONS TO THE REMOVAL OF THE UTERUS.

Dr. Alex. Hugh Ferguson, Chicago, (*Am. Jour. Surg. and Gynecology*,) objects seriously to removal of the uterus when pus-tubes are the cause of mischief, because: (1) It takes longer to do the operation, and the mortality is higher; (2) the primary hemorrhage is greater and the secondary more liable to ensue; (3) greater shock; (4) more liable to injure ureters, bladder and rectum; (5) the patient is less of a woman, anatomically and socially; (6) the vagina is shortened; (7) hernia of the vagina is

liable to follow ; (8) a healthy uterus is often removed on account of the difficulty of diagnosticating, beforehand, the amount of disturbance caused by the inflamed tubes, ovaries and uterus respectively.

THE INFLUENCE OF CLIMATE ON MENSTRUATION.

JOUBERT, in an article in the *Indian Medical Gazette*, (*Med. and Surg. Reporter*,) says that from a careful study based upon over 3,000 patients, between the ages of ten and nineteen years, he has arrived at the conclusion that the reason why girls in tropical countries menstruate at a relatively earlier age than Europeans is not because of the influence of the climate, but because of too much sexual excitement.

LACTATION ATROPHY OF THE UTERUS.

VINEBERG (*Amer. Jour. Med. Sc.*, Vol. CXII., No. 1,) contributes a paper to the study of this subject. He has been led to the following conclusions :

1. Modern researches tend to prove that post-puerperal involution consists chiefly in a retraction and contraction of the individual muscle-fibers, whereby the whole uterus is reduced in size.

2. When involution goes on to its full completion the uterus is reduced to a size smaller than that of the nonparous organ.

3. This condition of complete involution is known as post-puerperal hyperinvolution. It is principally seen in nursing women, and from this circumstance has received the cognomen *lactation atrophy*.

4. The so-called lactation atrophy is a normal and desirable condition. It is temporary in its duration, but very rarely under favorable circumstances may become permanent.

5. When the parturient is unable to perform the function of lactation it is the duty of the physician to endeavor to bring about hyperinvolution by other means at his disposal. An observance of this course will prevent many a woman from developing a host of gynecological affections which frequently result from imperfect involution.

FACE PRESENTATIONS.

P. DREYER (*Norsk Mag. for Laegevidensk.*, No. 3, 1897, abstracted in *Br. Med. Jour.*, July 10, 1897,) emphasises the difficulties met

with in malrotated face cases. When the chin is to the front no other treatment than that employed in vertex cases will be needed; but when the chin is posterior, one should leave the case to nature till, after complete or nearly complete dilatation of the os externum and rupture of the membranes, one recognises that in spite of good pains the chin does not in an hour or two pass into the pelvic cavity. If, then, there are signs of danger in the lower uterine segment, and if the fetal heart-beats are diminishing in number and becoming irregular, the time has come for changing the presentation by "redressement." This treatment the author prefers to version, even when immediate delivery is necessary, and he follows it at once by the use of forceps. He thinks there is less danger in applying forceps to the occiput in its high position than in trying version when the lower uterine segment is much distended.

VENTROFIXATION IN RETROVERSION OF THE UTERUS.

A. Lapthorn Smith, of Montreal, read a paper before the American Gynecological Society, at Washington, May 6, 1897, on this subject. His paper was based upon ninety-four ventrofixations and fifty-three Alexander's operations. He held that ventrofixation was the only operation that should be entertained in cases of retroversion with adhesions; but it should not be done when the uterus was movable and when there was no disease of the appendages requiring abdominal section, in which cases Alexander's operation had given excellent results. There should be no death-rate to either operation, neither should there ever be hernia, either ventral or inguinal, if the following directions were followed: the two operations were equally easy, although a few years ago the author was opposed to Alexander's operation on account of its difficulty. Now he could invariably find the ligaments, and generally in from half a minute to a minute and a half. He warned his hearers not to do Alexander's operation if there were any adhesions, even if they were loose enough to permit the uterus to be lifted up; because they would be put upon the stretch and would drag so much upon the ligaments as to finally pull them out of their anchorage. In laying down the technique of Alexander's operation he placed great stress upon the importance of putting aside all cutting instruments as soon as the skin, superficial and deep fascia had been cut through. Instead of laying open the inguinal canal, as advocated by some writers, he advised his hearers not to cut a single fiber of the inter-

columnar fascia, which was the principal support of the pillars. Moreover, he said, the slightest nick of the fascia of the internal oblique would lead to a false passage and failure to find the ligament. If no cutting instruments were used, but only a Pean's forceps to draw out the ligament, there would be no difficulty in finding it, because there was nothing else in the canal but the ligament. In fact, with the eyes bandaged it could be found and drawn out, simply by introducing the closed forceps and then opening them, when the round ligament will fall into them and can be drawn out. He advocated the use of fine silkworm gut, which could be thoroughly sterilised and left in permanently. Occasionally he had been obliged to remove a buried stitch. In case any fibers of the intercolumnar or internal oblique should be accidently cut, great care should be exercised in sewing them up to avoid hernia. He had only one relapse after ventrofixation and one after Alexander, which were both subsequently repaired. Several of the cases of ventrofixation had since become pregnant and had had normal confinements. Also several cases of Alexander had had children. Many of the patients had been bed-ridden invalids for years before and were now enjoying excellent health. Both operations, each in its proper sphere, had given the greatest possible satisfaction.

Selection.

STERILITY.[1]

By AMAND ROUTH, M. D., B. S.,

Obstetric physician with care of out-patients at Charing Cross Hospital, and lecturer on practical obstetrics at the Medical School; physician to Samaritan Free Hospital for Women.

THE subject of sterility has been differently classified. In this lecture I propose very briefly to enumerate the causes of sterility resulting from abnormalities or disease in the male, and then to discuss the causes of sterility in women, omitting all cases of non-absolute sterility where conception may occur, yet a viable child is not obtained.

To fully explain my meaning I give a classification of sterility which appears to me to cover all the ground :

1. Abstract of a post-graduate lecture, delivered at Charing Cross Hospital on June 3, 1897.

CLASSIFICATION OF CAUSES OF STERILITY.

I. *Absolute, i. e.,* where there is no evidence of conception.

(*a*) Congenital—due to congenital conditions which have always existed. (*b*) Acquired—1. Primary—due to inflammation or other causes present at marriage, entirely preventing conception. 2. Secondary—coming on after the birth of a living child at same or previous marriage.

II. *Nonabsolute, i. e.,* conception takes place, yet a viable child cannot be obtained, owing to fetal death and abortion, and the like. This is usually due to noncongenital causes—acquired—and may, of course, be either primary, no fetus reaching a viable age, or secondary, due to recurring abortion due to subinvolution, and the like, after a viable birth.

I shall here only deal with causes of absolute sterility.

One in ten marriages is sterile according to Matthews Duncan. He considered the first birth usually occurs twelve to fifteen months after marriage; but may be as late as three years. Fertility in women is greatest between 26 and 38 years of age.

Medical men are often consulted by women with a view to their having children. In any such case it is better, if opportunity offers, to make enquiries as to whether the fault may not be on the husband's side. This is easily done if the patient is consulting the family doctor, but not so easy when a gynecologist is first consulted, for the husband is usually not available for the purpose. In such a case the family doctor would naturally be the one to make the necessary investigation.

In order, however, to make the subject a complete one, I will first name some of the commoner causes of sterility in the male, constituting (Kehler) probably 25 per cent. (Gervis, 7 to 15 per cent.,) of all the causes of sterility.

Causes of sterility in the male:

(1) *Constitutional*—Syphilis; Bright's disease, especially the granular kidney; diabetes; and lead-poisoning.

All these act by causing the spermatozoa to lack vitality, rendering them unable, therefore, to perform their essential spontaneous movements satisfactorily. These causes lead more particularly to an early death *in utero* (nonabsolute sterility), but may induce a condition of *absolute* sterility.

(2) *Local causes*—Absence of testes. Both testes undescended (cryptorchis). Double obstructive epididymitis (gonorrheal especi-

ally). Double tubercular epididymitis. Stricture of the urethra. Nonvitality, or absence of spermatozoa, as discovered by the microscope.

Impotency—which means incapacity for copulation, as opposed to sterility, which means incapacity for procreation. Although impotence is often a cause of sterility, it is not necessarily so, for conception may take place without penetration.

It is hardly necessary to add that a sterile male is not, in the preceding cases, usually impotent.

The majority of cases of sterility are, however, of female origin. Kehler says 75 per cent., Gervis 85 per cent.

Before considering the causes in the female, a few words as to the details of conception may be stated.

The semen having obtained entrance into the vagina, the spermatozoon passes by its own spontaniety upward along the genital tract, towards the ovary, against the current caused by the cilia, to encounter the ovum. During ovulation the ovum escapes from the matured and ruptured Graafian follicle, and is conveyed into the Fallopian tube and into the uterus by means of the current, which is continuously present, running from the peritoneum to the uterus, and which is caused by the action of the cilia in the Fallopian tubes. As soon as the ovum is received into the Fallopian tube it is conveyed downward by means of the cilia. Contact between the spermatozoa and ovum may ensure impregnation at any part of this transit. During the passage along the tube, the mucous membrane of the uterus is being prepared for the reception of the ovum by the formation of the decidua vera. If any of these processes are absent or interfered with, sterility may result.

Bearing this in mind, therefore, the following are groups of causes which would occur to one during the examination of any given case:—

(1) *Causes which prevent penetration* have to be dealt with first. It must, however, be remembered that in exceptional cases of impotence, or after intentional "withdrawal" where intravaginal emission has not occurred, conception may yet take place. Amongst these causes are some congenital ones: absent or solid vagina; stenosis of the vagina; imperforate or resistant hymen.

Some of these vaginal conditions may be simulated by inflammatory processes; and they may, with greater or less difficulty, be dealt with by operation, and the sterility may then sometimes be cured. They are at once ascertained by inspection and digital

examination. If the uterus and ovaries are present and well developed, the history would show that amenorrhea, with dysmenorrhea, had existed since puberty, and there would perhaps be a hypogastric swelling, due to either hematometra, or to elevation of the uterus by hematocolpos. Vaginismus and dyspareunia are causes occasionally preventing penetration, and may be due to either a local state alone, or superadded to a state of general neurosis.

(2) *Penetration may be normal, yet the spermatozoa may not be able to ascend* beyond the upper end of the *vagina*, or if they do ascend, no suitable nidus *in utero* is available.

Amongst the causes relating to this group may be mentioned:

Absent or solid or very undeveloped uterus (incurable).

Immature uterus. This may tardily but sufficiently mature.

The so-called sterile uterus, which is really a small uterus associated with anteflexion, a condition normal during infancy, with a conical and often elongated cervix, and round instead of transverse external os uteri.

Cervical stenosis, congenital or acquired, with perhaps resulting hematometra (if complete). This might be curable by dilatation.

Hyperinvolution.

Post-climacteric atrophy.

Destruction of lining membrane by atrophic endometritis, or by use of escharotics, such as nitric acid.

Fallopian tubes, solid or absent (not diagnosable).

Tubal stenosis, or constriction of the tubes by external adhesions, or closure of the peritoneal end of the tube by lymph.

Tubes distended by serum, pus or blood (hydro-, pyo-, or hemato-salpinx).

Most of these would be determined by bimanual examination with, or without, the use of the sound.

(3) Conditions involving *destruction or loss of vitality of the spermatozoa during transit* along the genital tract. These are mainly inflammatory states, especially those due to gonorrhea, affecting the vagina, endocervix, endometrium, or lining membrane of Fallopian tubes, producing acrid discharges. Subinvolution is only a cause because it is often associated with endometritis. Fungous endometritis is also a common cause of sterility, and is often a pure overgrowth, not of inflammatory origin at all.

(4) The *passage from the vulva to the fimbriated extremity of the tube may be quite patent and there may be no inflammation present*, yet sterility is present. The reason may be *in the function*

of ovulation. Either the ovary is absent or contains no follicles; or the ovary has become completely sclerosed and its follicles destroyed by inflammatory or malignant changes. If the ovaries were congenitally absent or functionless, there would be moderate anemia, with absence of all menstrual molimina, and there would almost certainly be absence of the signs of puberty. Occasionally double ovarian cysts may lead to complete destruction of the epioöphoric elements. Double ovariotomy or removal of both appendages would, of course, lead to the same result. One of the commonest causes, however, of faulty ovulation is a thickened capsule, the result of perioöphoritis. This prevents the escape of the matured ovum, and in turn leads to retention cysts being formed, and secondarily to disorganisation of the neighboring stroma and follicles.

(5) *Ovulation itself may be normal, yet the ovum is not received into the Fallopian tube.* This may be due to blocking of the tube near or at its fimbriated end, or to other tubal obstructive disease, such as hydro- or pyo-salpinx; or the mischief may be due to an altered position of the ovary, especially if it is fixed at some distance from its tube.

If there has been salpingitis, the tubal cilia are destroyed, and the current from the peritoneum to the uterus is absent.

I have said very little as regards uterine displacements, mainly because they do not *per se* produce sterility. An anteversion or an anteflexion would never produce sterility, unless associated with a true narrowing of the external or internal os uteri, or with other developmental immaturity, or with some inflammatory state. Retroversion and retroflexion, however, are much more likely to cause sterility, which is, as a clinical fact, often cured by replacement and a well-fitting Hodge; but even then the sterility is more often directly due to a coëxistent endometritis, or endocervicitis, than to the mere displacement. Fibroids again, though often productive of sterility, often lead rather to very early abortion; and even if sterility does exist, it is often due to a coëxisting fungous endometritis, or a cervical catarrh, or to the menorrhagia lasting so long that the duration of the process of ovulation is entirely covered by the menstrual loss. Or there may result a mechanical torsion of the canal, or a dragging up of the cervix, or perhaps even more frequently fibroids tend to displacement, torsion, or stretching of the Fallopian tubes. Malignant disease is also a frequent cause of acquired sterility; but, coming on late in life,

may practically be said to be rarely a cause of primary sterility. It is not very rare also for pregnancy to coëxist with epithelioma of the cervix.

Constitutional causes of sterility in women are mainly those conditions which lead to impaired nutrition; but even here the sexual organs seem to be capable of carrying on their functions when all other organs have their functions impaired or in abeyance. Even constitutional syphilis probably acts mainly in this way by impairing nutrition.

One must not forget to allude to *causes of apparent sterility*, due to "preventive" methods being adopted by the consent of both parties, or even by husband, or wife, unknown to his or her partner. Dyspareunia and vaginismus again may lead to sterility by preventing marital intercourse altogether.

The examination of a sterile woman with a view to discovering the cause should be conducted methodically, after the necessary questions have been put as to dyspareunia, and the like. The breasts should be examined to note the presence or absence of the mammary glands and the development of the nipples. Lack of development here is often a fair indication of a similar condition of the pelvic organs. The abdomen should then be examined with a view to discovering the presence of an abdominal tumor, as would obtain in fibroids, or hematometra, due to occlusion. At the same time it will be noticed whether the pubes is normally developed. Inspection of the vulva and digital examination of the vagina will be made, and any spasm, constriction or stenosis noted. By the same means the cervix would be examined and such details as a conical shape, or small os, discovered. By bimanual examination the size, shape, outline, consistence and mobility of the uterus would be determined, and the presence of any periuterine swelling in the posterior quarters of the pelvis or in Douglas's pouch would also be felt. The relations of these to the uterus, with their relative mobility, their consistence, and their degrees of tenderness, would help one greatly to determine whether they were uterine, ovarian or tubal, or were perimetric inflammatory exudations. The sound should rarely be used, but may be useful to confirm the results of a bimanual examination, and the speculum may also occasionally be usefully employed.

Successful treatment of sterility depends mainly upon the removal of the causes. Sometimes this is exceedingly easy, sometimes it is impossible. It is easy, for instance, in the curing of an

inflammatory state, in the dilatation of a narrow uterine canal, as may occur in cases associated with spasmodic dysmenorrhea. Treatment is easy also in cases of retroversion, where replacement can be easily effected. Treatment is difficult where the ovaries or tubes are at fault, the result of displacement or of inflammation; and successful treatment is practically impossible when the cause is lack of development in the organs concerned, or where fibroids have formed, or malignant disease is present.

In any case where it is not absolutely certain that the sterility is due to causes in the woman under consideration, it is far better to see the husband, or to get him to see some surgeon skilled in such cases, so that any causes of sterility on his part may be discovered and an unnecessary operation on the wife avoided. Much tact must be exercised in such an examination of the husband, for it unfortunately happens that he will rarely admit the possibility of the fault being on his side, and almost invariably assumes that his partner is the one in fault.

This probably arises from the fact that the sexual appetite may be absent in the wife, and the husband's assumption is the result of a popular, but erroneous belief, that the presence of such satisfaction is essential to procreation.—*Treatment.*

The Duration of Infection in Whooping-Cough.—Weill, who in 1894 expressed the opinion that whooping-cough is contagious only during the premonitory catarrhal stage, has since put his opinion to the test. On various occasions he permitted nearly one hundred young children, who had not previously suffered from whooping-cough, to be associated in the same ward, for twenty days or more, with children suffering from the disease during the stage of whooping. In only one case was the disease contracted, and in this instance the patient, from whom the infection was derived, was in the very earliest period of the whooping stage. In three small epidemics Weill was able to satisfy himself that infection was contracted from children who had not yet begun to whoop. He concludes that infection ceases very soon after the characteristic whoop commences and that, therefore, in a family it is not the patient who is already whooping, but his brothers and sisters who have not previously had whooping-cough, who ought to be isolated.—*Lyon Méd.*, May 19, 1897.—*Universal Medical Journal.*

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FREE PUBLIC BATHS.

THE great value of free public baths as a sanitary measure in large cities is already admitted. The success that has attended their establishment in Buffalo is somewhat phenomenal when considered in the light of novelty and prejudice. It was not a trifle to overcome the latter. Ignorance is always the stronghold of prejudice, and novelty serves as a feeder to opposition. At any rate, there are many people in the world and especially among the ignorant in the large cities, who do not brook improvement or welcome reform.

The free public bath system of Buffalo was opened January 1, 1897, and is reported to be the first of its kind in the United States. At all events, we propose to give a brief description of it and rest our claims to priority with the record. The visitor will find a substantial red brick structure standing on the upper terrace, two stories in front elevation, extending back a distance of about sixty feet. Entering the vestibule a turn to the left finds one in a comfortable office room, say 14 x 16, in which are found the desk of the superintendent, a stack of clean towels, a box of soap, neatly cut into small squares, fourteen chairs for the accommodation of those in waiting and a blackboard on the wall on which is taken the daily census of the bathers.

Entering the bath proper, first on the right is discovered an ordinary bathroom, fitted up with bathing tub and all the conveniences pertaining to a private bath, which is for the accommodation of feeble women and babies. Next adjoining is a water-closet, and then a pool room in which fifteen or twenty boys may be showered at one time. On the right and left of a long corridor

are fourteen individual bathrooms, where each bather secures the privacy that belongs to an ordinary home bath. Receiving his towel and soap from the superintendent the bather goes directly through the corridor into the bathroom to which he is assigned, disrobes in the front section, thence passes into the bathroom proper, where he turns on hot and cold water to his liking. The bathers are received in groups of fourteen, and their places are immediately supplied in the waiting-room by fourteen others, who come from the crowd in waiting on the street. Twenty minutes are allowed to each group and they are required to take their turn in rapid succession.

The hours for men and boys are from 7 to 12 in the morning and for women and girls from 1 to 6 in the afternoon. About 500 people avail themselves of the privilege of the bath each day. We omitted to mention the fact that a laundry is provided where a bather may wash his shirt, hang it in the hot-air drying chamber, and it will be ready to put on when he emerges from the bath.

The influence of such a system on the health of the community must admittedly be considerable, and we know of no investment that yields so large a dividend in sanitary results. It is at the present season of the year especially important that frequent baths should be taken if health would be preserved, but experience has shown that the free public baths in this city are in nearly as great demand in the cold weather as in the warm season. Whoever may have conceived prejudice against the public baths by reason of supposed danger of infection, contagion or uncleanliness, has but to visit them and carefully inspect their whole management when all such prejudice will vanish.

In this relation it may not be out of place to contrast the Buffalo system with that in vogue in New York. At the Grand street free bath there is always a motley group waiting for admission. The baths are open from sunrise until late evening and they are occupied every moment of the day. In the late afternoon and evening they are specially besieged by hundreds who are pushing and fighting for a chance to plunge into the salt water which is rarely clean.

The bathers are admitted in crowds—in droves. At the most crowded hours there are sometimes in the largest of the baths several hundred bathers splashing and plunging and diving about: At times they are so numerous that they fairly obscure and fill the water. If the bathers would but hold their places, one could cross

the water dry shod by stepping upon their heads. But they do everything but hold their places. The little dressing-rooms are packed like sardine boxes for about a half minute when a fresh relay of bathers is admitted. It takes no longer than that to undress and don the scanty trunks demanded, for time is precious in the baths.

There are no doors to the dressing-rooms, there are no keys, there is no place to deposit valuables. The east side brings no valuables to the baths. The east side knows the east side. It is lucky to find its clothes when the attendants chase it out of the water at the end of twenty minutes or so. Sometimes it doesn't find its clothes. Towels are unknown in the free baths. A man or boy who brought a towel to a free bath would at once mark himself as an aristocrat and would have a very bad quarter of an hour at the hands of his companions. Combs are eschewed with equal unanimity. All there is is water, and sometimes even that is of an inferior quality.

Buffalo may well be proud of her free public baths. Here the water is clean, hot or cold, or both ; towels and soap are furnished and the bather's clothes are safe while he is taking his ablutions. The baths are now permanently instituted, and for their successful management the city owes not a little to the health commissioner, Dr. E. Wende, who has from the first been a firm advocate of their establishment and has labored for their thorough sanitary conduct.

ROOF GARDENS FOR THE PEOPLE.

NEW YORK'S new recreation pier at the foot of Third street, East River, has proven a boon to a class of humanity that finds it difficult to get a puff of fresh air even in the daytime, to say nothing about nights in their overcrowded tenements.

Whoever proposed to utilise the pier-houses by adding roof-gardens to their tops is a philanthropist in the fullest sense of the word. The new pier referred to is a well-built two-story fire-proof structure, with iron stairways leading from the street to the recreation floor, which latter has an arched iron roof with open sides between the girders and is illuminated at night with arc lights.

On hot afternoons the place is crowded, while at night there is literally a crush. At the entrance perambulators are left, which

creates a blockade of empty baby carriages. Generally speaking, a band plays at night as well as upon several afternoons during the week. Quick music sets the youngsters to dancing and popular airs start them all a-singing; so that often the singing, shouting and whistling are almost deafening and pandemonium seems let loose. One can scarcely hear the band play half the length of the pier, yet no one is disturbed by the noise, for it means health and happiness to those sadly in need of both.

It takes very little to make these people happy: a penny's worth of ice cream being sufficient to delight the hearts of two children and those with more delicate stomachs may obtain sterilised milk for a small outlay, while for the robust there is candy and open-face pies galore—all for a few pennies.

The health-preserving powers of these piers is beyond estimation, and New York has set an example that is worth emulating. Here the poor, without money and without price, can breathe pure air, listen to good music and spend evenings in innocent amusement that is health-promoting.

Several uniformed employees of the dock department and a few policemen keep order on the floor, while two matrons, in black with white aprons, collars and cuffs, look after the comfort of women and babies. Municipalities are fast learning that it is economy to prevent sickness by affording opportunities for the poor to work and to provide them with innocent recreation as well as free baths.

Obituary.

Dr. William C. Wey, of Elmira, died at his residence in that city July 1, 1897, aged 68 years. Though he had been in failing health for some months his end came somewhat unexpectedly, yet serenely peaceful. Dr. Wey was born at Catskill, January 12, 1829. His father, William H. Wey, was a druggist, and his great-grandfather, Dr. Thomas O. H. Croswell, was a practising physician of note in the village. In his student days he became a pupil of Dr. Alden March, whose surgical assistant he was, and he graduated from the Albany Medical College January 23, 1849. He located at Elmira in the spring of the same year, which was before the village enjoyed railroad facilities, so that in the early years of his practice Dr. Wey led the life of the country doctor of the period.

ERRATA :

Dr. Wey died June 30, 1897, instead of July 1st, and Mrs. Wey died 1887 instead of 1877.

He soon acquired a surgical reputation and went long distances into the country to perform difficult operations in the pre-anesthetic period.

WILLIAM C. WEY, M. D.

Early in the war of the rebellion Dr. Wey was appointed an examiner of recruits, later he was appointed by the United States government surgeon-in-charge of the hospital, and still later, medical officer to the confederate prison at Elmira. In his early

professional career he served as coroner of Chemung county, and was the first health officer in Elmira after it became a city; again in 1894 he was appointed health officer, serving in that capacity until failing health compelled him to relinquish his duties. For six years he was a member of the board of education, taking great interest in the affairs of the board, and, it is needless to add, discharging the duties thereof with energy and fidelity. Dr. Wey was appointed, by Governor Tilden, a manager of the State reformatory, March 5, 1875, and he served continuously in this capacity until his death, a period of over twenty-two years. He was also, for a number of years, one of the managers of the New York State Inebriate Asylum at Binghamton. He was a manager and senior consultant of the Arnot-Ogden Memorial Hospital, and the last time he left his residence, a fortnight before his death, was to attend a meeting of the managers of the hospital. During the forty-eight years of his residence in Elmira he occupied but three offices: the first was in the old Dunn Block, corner of Lake and Water streets, where he remained until the winter of 1853; he then moved his office to a house situated on East Water street, where he remained until the autumn of 1876; he then moved to the corner of Main and West Second streets, which office he occupied until his end.

Dr. Wey was married, November 15, 1853, to Mary Bowman Covell, daughter of Dr. Edward Covell, of Wilkesbarre, Pa. Two children were born to them, both now living—Dr. Hamilton D. Wey and Mrs. Ray Tompkins, of Elmira. Mrs. Wey died in 1877, and his daughter married in 1893, since which time the father and son alone occupied the family home. His sister, Mrs. Seth H. Grosvenor, of Buffalo, also survives.

Dr. Wey was elected president of the Medical Society of the State of New York in 1871, presiding at the meeting held the following year. He chose for the subject of his presidential address, Medical responsibility and malpractice. It was a scholarly paper, attracted considerable attention, and evinced much knowledge of forensic medicine. His closing words were prophetic, though little did he dream, perhaps, that he would play so conspicuous a part in the reform predicted.

Said he: "With the profession rests the power to accomplish a reform of the system of medical education; such a thorough reform as will extend throughout the nation. Some among you, I know, have pictured to yourselves an ideal standard of preparation for the profession, including the processes by which a pupil is

carried through the stages of growth in medicine to the possession of his degree, and so on to the higher positions to which his qualifications give him access. Through much strife, opposition and discouragement such a change is surely coming. Not in your day, nor in mine, but in that future which awaits the greater development of our country, disenthralled medical science will stand conspicuously forth as teaching given from God."

Dr. Wey was chairman of the special committee on the code of ethics of the Medical Society of the State of New York, appointed by President Bailey in 1881, his colleagues being Drs. Agnew, Vander Poel, Ely and Piffard. This committee presented a report in 1882, revising the code of ethics of the American Medical Association that had heretofore been in force in the state medical society. An exciting debate ensued, a substitute having been presented by Dr. Roosa providing for the abolishment of all written codes. Finally, however, the new code was adopted by a two-thirds' vote, this action being ratified in 1883, and again in 1884. As a consequence the Medical Society of the State of New York was disbarred from representation in the American Medical Association, a condition that has continued to the present time. Subsequently the state medical society abolished all written codes and is now governed by the only rule that obtains among gentlemen —that of honor.

Dr. Wey was chosen president of the State Medical Examining and Licensing Board at its first meeting, September 1, 1891, in which place he continued until his death. He was also examiner in physiology and hygiene, and through his scholarly attainments, interest in the work, and efficiency as an examiner and presiding officer, contributed largely to the success attained by the state medical examining board in elevating the status of the profession of medicine.

Dr. Wey was a man possessed of great dignity of character, rare courtliness of manner, and was a representative of all that goes to make up the best type of nature's noblemen. In his chosen profession he occupied conspicuous eminence, which, through his scholarly learning, marked ability and wealth of resource, contributed to make him easily the most eminent physician in the Chemung Valley, a statement that need in nowise disparage his colleagues. Above and beyond his profession he was a man of accomplishment, well trained to thought and action, a resourceful debater and an easy speaker, a wit at the dinner table, possessed of a

musical voice, a winsome manner and a sweetness of expression that made him socially one of the most attractive of men. It will not be easy to fill his place in the several official positions that he so ably and gracefully adorned, nor in social, professional or civil life—in all of which he leaves a cherished memory and an inspiring example.

His obsequies were simple, only the ritual of the Episcopal church, and that was all. His remains were followed to their last resting place by the family, the Medical Society of the County of Chemung, the pall-bearers, and the State Medical Examining Board, the members of which latter body came from the four corners of the state to pay a last tribute of respect to the memory of their beloved colleague.

Dr. Orson S. St. John, formerly a resident of Buffalo, died at New York, July 9, 1897, aged 87 years. He was born in Buffalo. His mother's house was the only one left standing at the time Buffalo was burned by the British and the Indians in 1812. He joined the Medical Society of the County of Erie in 1831.

His last public appearance in Buffalo was many years ago, when he read a paper before the Buffalo Historical Society. His only relatives in this city are the members of the Sidway family. He was a younger brother of the late Mrs. Sidway, the mother of Franklin Sidway, of this city, and was well known among old residents of Buffalo.

After preliminary study in Buffalo, Dr. St. John was educated in law in Cleveland and Cincinnati, O., and was graduated in medicine in Philadelphia. Possessed of independent means, he practised little in either profession, but for half a century had devoted himself to literature and scientific investigation, the latter especially directed to the origin of life and celestial mechanics and resulting in the discovery of many now well-known principles. Dr. St. John was a deep student and extensive traveler and was widely known in collegiate and scientific circles in Europe and America. His wife died several years ago and his home since then, when in this country, had been with his daughter, Mrs. Andrews. G. C. St. John, of New York, is his son. His body was taken to Ohio for burial.

Dr. Frederick H. James, of Lancaster, died at his home in that village, June 28, 1897, aged 72 years. He retired from professional

work some years ago, but retained the presidency of the glass works at Lancaster and was a trustee of the Erie County Savings Bank until his death.

Dr. James's gift to the Buffalo Fine Arts Academy of a rich collection of line engravings and etchings is reckoned, for its general value, as one of the best in the country; and in its representation of the work of Seymour Haden it is unsurpassed anywhere. It is stated that the collection includes an example—often in choice proof state—of every known work of this great master of etching.

His gift of rare coins to the Buffalo Historical Society was equally noteworthy. There are over 13,000 pieces, representing probably more than that number of dollars, and including many coins, tokens, medals and the like of great rarity and historic interest. He was one of the best connoisseurs on the subject in this country and used to declare that there were many pieces in his collection which, if lost or destroyed, could never be replaced.

Dr. James had been a corresponding member of the Historical Society since 1869, a life member since 1890 and a member of the board of managers since 1894. At a meeting of the board recently a suitable memorial was adopted and the board voted to attend the funeral in a body.

Dr. Benjamin F. Sherman, of Ogdensburg, died at his home in that city May 30, 1897, aged 80 years. He was the most prominent physician in his section of the state, and by his amiability of temper, professional accomplishment, dignity of character and courteous manners, contributed largely to the *esprit de corps* of the medical profession of Northern New York.

Dr. Sherman was elected president of the Medical Society of the State of New York in 1884, in the midst of the now almost forgotten code controversy, and his espousal of the new code contributed not a little to its successful adoption and solid maintenance. His opinion was often sought as a consultant at great distances, and he retained his association and popularity with young people even to his end. He was the dean of the Medical Society of the State of New York and he had seldom been absent from its meetings during the period of his membership—nearly a third of a century. His tall, commanding presence, his dignified bearing and his urbanity of manner will be greatly missed in the future councils of the society.

Personal.

Dr. B. Sherwood-Dunn, of Los Angeles, (*Pacific Med. Journal*, July,) suffered several weeks ago from a very serious loss by fire. His valuable collection of paintings, bronzes, bric-a-brac, tapestry and an extensive library of 3,500 handsome volumes were completely destroyed. Many of these books were rare and difficult, if not impossible, to be replaced. But we have other than unpleasant things to report of Dr. Sherwood-Dunn. A visit from the Consul general of France a few days since brought to him the pleasing intelligence that the French Government had decorated him with the Cross of Officer of the Academy. Medical men are not too frequently the recipients of honor such as this, and the profession of the state will sympathise with Dr. Sherwood-Dunn for his losses by fire and at the same time extend sincere congratulations for his recent and well-deserved honors.

Dr. Woods Hutchinson, of Buffalo, contributes an article on the Value of pain, to the *Monist*, for July, which is as striking in its homiletic as it is in its scientific point of view. The author draws some profound ethical conclusions as to the function of pain in life and drives his lessons home with great literary and imaginative power.

Dr. Francis E. Fronczak, of Buffalo, has established himself at 508 Fillmore avenue for the practice of his profession. He has been appointed visiting physician and surgeon to the Felician Sisters Hospital, Polish Orphan Asylum, and the Old Man's Home at Cheektowaga.

Dr. Roswell Park, whose illness we referred to in the June issue of the Journal, is making good progress toward recovery. He is at present at Cushing's Island on the coast of Maine and expects to resume his work in the early autumn.

Dr. A. R. Wright, of Buffalo, was elected president of the American Institute of Homeopathy at its recent meeting held in this city. The meeting next year will be held in Omaha, Neb.

Dr. C. F. Durand, formerly of Lockport, has recently taken up his residence in Buffalo. His offices are located at 258 Franklin street.

Society Meetings.

The tenth annual meeting of the American Association of Obstetricians and Gynecologists will be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday and Friday, August 17, 18, 19 and 20, 1897.

The management of the Cataract House (which should be addressed on the subject) offers a special rate, American plan, to all guests who visit Niagara under the auspices of the association during that week. The Cataract will also provide a splendid room for the meeting.

The railways will sell return tickets to all who visit Niagara under our auspices for one-third the regular fare; *provided* the visitor obtains a certificate from the ticket agent at the starting point setting forth the transaction, which certificate must be signed at Niagara by the secretary of our association and there viséd by an agent of the Traffic Association. This agent will be in attendance on Wednesday and Thursday, ONLY.

OUTLINE PROGRAM.

The association will meet in executive session with closed doors on Tuesday, August 17th, at 9.30 o'clock A. M., for the election of new Fellows. The open session for the reading of papers will begin at 10 o'clock. Recess for luncheon at 1 o'clock P. M. Afternoon session at 3 o'clock and adjournment for the day at 5 o'clock.

The morning session will begin Wednesday at 10 o'clock for the reading of scientific papers. Recess at 1 o'clock. Afternoon session at 3 o'clock. Adjournment at 5 o'clock.

The morning session will begin Thursday at 10 o'clock to continue until 1 o'clock P. M., when recess for luncheon will be taken. The afternoon session will be called at 3 o'clock and at 5 o'clock adjournment of the scientific session for the day will take place.

At 6.30 P. M., Thursday, the executive session will convene for the election of officers and for such other business as may come before it.

At 8 o'clock P. M., Thursday, immediately after the executive session, the annual dinner will be given at the Cataract House.

Friday morning the closing session will begin at 9.30 o'clock. Final adjournment at 1 o'clock. A full attendance is specially requested at the final session.

It will be observed that there are to be no evening sessions for

scientific work. The session appointed for Friday morning will make up for this, and the early adjournment each day (5.00 P. M.) will enable members to visit the several points of interest; mornings, too, before 10 o'clock can be appropriated to this purpose. There is no more delightful place than Niagara in mid-August, and the business of the association can be conducted in the midst of the most fascinating surroundings, where both nature and art have conspired to excel in attractiveness. It is hoped that the Fellows in large numbers will improve this exceptional opportunity to combine pleasure and scientific work and unite to make this one of the most notable meetings yet held.

PAPERS PROMISED.

1. .....President's address. James F. W. Ross, Toronto.

2. Pelvic inflammation: its causes and relations. A. P. Clarke, Cambridge.

3. Recent experiences with ventro-fixation. H. E. Hayd, Buffalo.

4. Surgical shock: its prevention and treatment. Walter B. Chase, Brooklyn.

5. Some remote sequelæ of the Baer operation. Rufus B. Hall, Cincinnati.

6. Puerperal diphtheria. H. W. Longyear, Detroit.

7. The prevention of pelvic disease. W. H. Humiston, Cleveland.

8. Appendicitis in relation to gynecology and pregnancy. John B. Deaver, Philadelphia.

9. Post-climacteric conditions that simulate advanced uterine cancer. M. Rosenwasser, Cleveland.

10. Ectopic gestation: a discussion of the changes occurring in the retained ovum, effused blood, and maternal tissues. L. H. Dunning, Indianapolis.

11. Placenta previa: with special reference to treatment. W. H. Wenning, Cincinnati.

12. Early diagnosis and treatment of cancer of the uterus. Wm. H. Myers, Fort Wayne.

13. Dynamic ileus following abdominal section. Frederick Blume, Allegheny.

14. What is the principal cause of puerperal sepsis? John Milton Duff, Pittsburg.

15. Incubation. John A. Lyons, Chicago.

16. Imperforate anus. John A. Lyons, Chicago.

17. Post-operative lesions and sequelæ: their extent, character and how to deal with them. Joseph Price, Philadelphia.

18. Reports of cases of reoperation following ventral fixation. Joseph Price, Philadelphia.

19. Two cases of intestinal obstruction: operation and recovery. William Wotkyns Seymour, Troy.

20. Technique of the dry method. Edwin Walker, Evansville.

21. The sequelæ of dead ligatures and sutures. George M. Hughes, Philadelphia.

22. Complete hysterectomy after injury during parturition and Cesarean section, with report of cases. Joseph H. Branham, Baltimore.

23. .....

J. Henry Carstens, Detroit.

24. The operation itself in appendicitis. L. S. McMurtry, Louisville.

25. .....

Charles A. L. Reed, Cincinnati.

26. Puerperal eclampsia: with special reference to treatment. William Warren Potter, Buffalo.

27. A case of Porro operation: recovery of mother and child. David Barrow, Lexington.

28. Tonic and spasmodic intestinal contractions: with report of cases. X. O. Werder, Pittsburg.

29. Fate of the ovaries in retroflexion and retroversion of the uterus. A. Goldspohn, Chicago.

30. Puerperal insanity. W. P. Manton, Detroit.

31. Cysts of the abdominal wall. Richard Douglas, Nashville.

32. Surgical treatment of puerperal sepsis: its possible prevention. Edwin Ricketts, Cincinnati.

33. Fifty cases illustrating personal experience in medical and surgical treatment of appendicitis. Geo. S. Peck, Youngstown.

34. Administration of phosphate of strychnia during gestation. W. B. Dorsett, St. Louis.

35. Masturbation in the female. B. Sherwood Dunn, Los Angeles.

36. Surgery of the kidney. J. B. Murphy, Chicago.

37. Treatment of puerperal endometritis by the Carossa method. Edward J. Ill, Newark.

38. Which is the preferable operation method of holding the uterus in position? C. C. Frederick, Buffalo.

39. Limitations of the surgery of the liver. W. G. Macdonald, Albany.

One of the sessions will be devoted to the presentation of pathologic specimens and their histories, with discussion pertaining to the same. It is especially requested that photographs of these specimens be filed with the histories, from which engravings will be made for the transactions. It is the belief of the executive council that this may be made easily one of the most interesting sessions of the meeting.

No attempt is made to arrange papers in the order in which they are to be read. That will be done in the permanent program. Correspondence is pending concerning additional papers. All remaining titles must be offered before July 27th, when the permanent program goes to press.

Fellows and visitors are requested to register and file their railway certificates with the secretary promptly on arrival.

The Niagara Falls Academy of Medicine very generously offers to promote the success of the meeting in every way possible. A committee of the Academy will be in daily attendance to give information to the visitors, and especially to escort the ladies to places of interest or to direct them thither. This committee will be designated by a knot of blue ribbon on the left lapel, and it is requested that every one at the meeting will make free to call upon its members for information and service.

JAMES F. W. ROSS, *President.*

WILLIAM WARREN POTTER, *Secretary.*

THE American Microscopical Society will hold its next meeting at the Boody House, Toledo, on Thursday, Friday and Saturday, August 5, 6 and 7, 1897. The Toledo Microscopical Society has very cordially invited their brethren from other parts of the country to pay them a visit, and has promised to do all in its power to render that visit entertaining and instructive.

Those who attended the gathering at Pittsburg last year will recall the welcome tendered and the interest manifested by members in the Iron City and their friends, and it is hoped that all who can do so, will renew the experience by coming to Toledo in 1897.

The officers for the Toledo meeting are as follows: president, Professor E. W. Claypole, B. A., D. Sc., (Lond.) F. G. S., Buchtel College, Akron, O.; vice-president, C. C. Mellor, Pittsburg; secretary, William C. Krauss, M. D., Buffalo; treasurer, Magnus Pflaum, Pittsburg; executive committee, A. A. Young, M. D., Newark, N. Y.; Mrs. S. P. Gage, Ithaca, N. Y.; W. P. Manton, M. D., Detroit, Mich.

The Buffalo Academy of Medicine held the following meeting in June not heretofore reported:

Section on Surgery.—Tuesday evening, July 29, 1897. Program: Some observations on the radical cure of hernia, by Dr. R. H. Harte, of Philadelphia, surgeon to the Pennsylvania hospital; exhibition of specimen, Dr. Eugene A. Smith; exhibition of cases, head injuries, Dr. Smith and Dr. Marshall Clinton.

Election of officers.

The Medical Society of the County of Chautauqua held its regular annual meeting at the Hotel Atheneum, Chautauqua, N. Y., July 13, 1897, under the presidency of Dr. E. S. Rich. The annual election of officers resulted as follows: president, Dr. Morris H. Bemus, Jamestown; vice-president, Dr. V. M. Griswold, Fredonia; secretary-treasurer, Dr. Charles A. Ellis, Sherman; censors, T. D. Strong, Westfield; W. M. Bemus, Jamestown; J. Murphy, Sherman; delegates to the Medical Society of the State of New York, E. S. Rich, Kennedy, and C. A. Ellis, Sherman.

A photograph of the society was taken in the afternoon. The title of the president's address was Notes on puerperal eclampsia, in which he reported a large number of cases. Dr. W. W. Hotchkiss, of Jamestown, read a paper upon Tonsilitis; Dr. T. D. Strong, of Westfield, read upon Influenza. Dr. Lucien Howe, of Buffalo, presented a case of great interest to the society, of diphtheritic membrane of the eye-lid in a boy, which had existed for many months. At 8 P. M. Dr. R. R. Ross, superintendent of the Buffalo General Hospital, lectured upon the X-rays, illustrating with the apparatus as he proceeded, taking a photograph of a fractured femur at the close. The following physicians were present: Drs. M. H. Bemus, W. M. Bemus, E. M. Scofield, R. B. Parks, W. D. Wellman, J. H. Wiggins, W. W. Hotchkiss, Jamestown; E. S. Rich, Kennedy; E. A. Scofield, Bemus Point; T. D. Strong, W.

Stewart, Westfield ; N. G. Richmond, V. M. Griswold, Fredonia ; N. E. Beardsley, G. E. Blackham, Dunkirk ; H. J. Dean, A. E. Dean, Brocton ; W. C. Duke, Cassadaga ; R. M. Evarts, Silver Creek ; T. C. Wilson, Dewittville ; L. C. Green, Panama ; C. A. Ellis, G. D. Marsh, W. M. Haynes, J. Murphy, Sherman; R. R. Ross, Lucien Howe, Buffalo ; Eliza Mosher, Brooklyn ; W. S. Bainbridge, New York City ; J. W. Seaver, Yale University.

The Mississippi Valley Medical Association will hold its next meeting at Louisville, October 5, 6, 7 and 8, 1897. All railroads will offer reduced rates.

The president, Dr. Thos. Hunt Stucky, and the chairman of the committee of arrangements, Dr. H. Horace Grant, promise that the meeting will be the most successful in the history of the association. and this promise is warranted by the well-known hospitality of Louisville and Kentucky doctors.

Titles of papers should be sent to the secretary, Dr. H. W. Loeb, 3559 Olive street, St. Louis.

The Lake Erie Medical Society held its regular quarterly meeting at Angola, July 20, 1897. Fifteen members were present. Papers were read by Drs. Lake, of Gowanda, and Dods, of Fredonia. Dr. Beardsley, of Dunkirk, entertained the society.

Public Health and Sanitation.

The Women's Health Protective Association of Brooklyn recently held its annual assembly. The object of the association is to coöperate with the health department in securing improved sanitation. Some of the most prominent women in Brooklyn are members.

The following interesting facts were given in the secretary's report : The seventh year of the Women's Health Protective Association closes with this meeting. Progress has been made all along the lines laid down in previous years. In the line of practical work the reform of the ash barrel and the garbage receptacles is still our aim. It is still our endeavor to gain the coöperation of our sister-citizens in keeping the barrels in neat condition, in having ashes and rubbish separated and all receptacles for

garbage whole and durable. The crusade against the objectionable habit of spitting has been carried on. Spitting in public conveyances is now punishable as a misdemeanor in New York, Boston, Philadelphia and San Francisco, while in Philadelphia signs forbidding it are also placed on lamp posts and trolley poles.

College, Hospital and Dispensary Notes.

The Buffalo German Hospital appears to be an assured success. At a meeting of the directors held June 4, 1897, Jacob Lang and Edwin G. S. Miller, on behalf of the children and estate of the late Gerhard Lang, tendered to them the sum of $5,000, to be used toward building the fine structure proposed for the hospital.

The gift was accepted promptly, and a resolution was adopted expressing the gratitude of the officers for the contribution, and directing that some suitable testimonial be placed in the new building to commemorate the generosity.

The persons participating in the contribution are Jacob, Catherine, Emma A. M., Bertha, Mary M., and Ludewina Lang, Anna E. and Edwin G. S. Miller, children, executors and executrices. A copy of the resolution was forwarded to each of these persons.

The meeting of the directors was held for the purpose of selecting a site for the new building. The property on the west side of Jefferson street, 200 feet south of Genesee street, which has a frontage of 150 feet and depth of 192 feet, and which has been under option for some time, was accepted and a committee was appointed to make the purchase and negotiate a loan sufficient to defray the expense of erecting the building.

It is estimated that the building will cost about $25,000 and the land about $10,000.

The board selected Geo. J. Metzger as architect for the building, he having manifested considerable interest in the project. He agreed to have plans ready by July 1st, and an effort will be made to have the building completed before the snow flies next winter.

The work of removing the old buildings on the site has already begun.

The directors of the hospital are Chas. J. North, Dr. Charles F. W. Auel, Jacob J. Lang, Ottomar Reinecke, Edwin G. S. Miller, William Simon, Jacob Stern and Charles Duchman. They all feel much gratified over the gift and the progress of the enterprise.

At a meeting of the board of trustees of the University of Cincinnati, held Saturday, May 15, 1897, a number of important questions were brought up, among which was the movement looking toward legislation by which all applicants for matriculation in the medical schools of the state shall have to pass an examination. The *Enquirer* is authority for the following report of the meeting, as it related to this subject:

The trustees and the faculties of the University of Cincinnati met for the first time in joint session. The meeting was called at the suggestion of Dr. C. A. L. Reed, of the university trustees. President Jones, of the board of trustees, was unable to be present, and in his absence Dr. Reamy was chosen to preside. Dr. Reed was the first to take the floor and, in an exhaustive paper, laid before the meeting a number of topics for its consideration. The most important matter, and the one which was discussed at great length, was that of an examination which shall be the same all over the state for admission to professional schools—that is, schools from which lawyers and doctors are graduated. A movement looking towards legislation by which all applicants for matriculation in these schools shall have to pass an examination by a state board has been started by the Columbus Academy of Medicine, and a number of other medical colleges have indorsed the movement. It was to take action on this matter that the meeting was called, but no action was taken, the matter being laid on the table for one year.—*Columbus Med. Jour.*

Dr. Louise Downer, formerly of the Warsaw salt baths, announces to the medical profession that she has opened a sanitarium at 174 N. Pearl street, Buffalo, N. Y. She has with her an able masseuse, Miss Abigail Hickey, favorably known by people of this city and highly recommended. The line of treatment will consist of brine, stimulating, sulphur, electric and cabinet baths, salt sponges and rubs, oil and alcohol-massage. She will be pleased to follow any line of treatment that the attending physician may suggest. It is desirable that application be made in advance. Physicians are cordially invited to call. Telephone, Bryant 670.

A hospital for the treatment of consumptives and persons suffering with contagious diseases is contemplated at Asheville, N. C. Mr. George W. Vanderbilt, whose generosity has made him so justly popular, proposes to donate $100,000 toward the construction of the institution, which will be, when completed, one of the finest hospitals in the south. Mr. Vanderbilt's philanthropy is of

the right sort, and if more wealthy men would build or endow hospitals, they would leave an enduring memory of the most savory nature.

Book Reviews.

MANUAL OF STATIC ELECTRICITY IN X-RAY AND THERAPEUTIC USES. By S. H. MONELL, M. D., Founder and Chief Instructor of the Brooklyn Post-Graduate School of Clinical Electro-Therapeutics and Röntgen Photography; Fellow of the New York Academy of Medicine. Octavo, 614 pages, cloth, gilt. Illustrated. New York: William Beverly Harison, Publisher, 3 and 5 W. 18th street. 1897.

This volume is the only exhaustive work so far published on the application and benefits to be derived from static electricity. The writer, who is a most ardent believer, has gone over the grounds admirably well and has championed the cause to the utmost. The adaptation of the X-ray to the Holtz apparatus enhances the value of this method of therapeutics and will encourage a wider field of usefulness.

The author divides the work in two parts, part first being devoted to a careful explanation of the apparatus, care of the Holtz machine and therapeutics of static electricity. The chapter on pain discloses the exactness of known indications for special methods of treatment. The chapter on morbid mental states is one of the most instructive and valuable in the book. Rheumatoid arthritis receives especially full consideration and directions for treatment of every stage are definitely described.

Two entire chapters establish the value of static electricity in the treatment of important skin diseases. These chapters will be found especially valuable to the general practitioner as well as to the dermatologist. The section devoted to the employment of static electricity in gynecology and the various phases of women's diseases states when and how to use this agent with this class of cases. The physiological properties of static electricity constitute the rational basis of its therapeutic uses and are fully stated.

Five chapters are devoted to Crookes' tubes, X-ray operative methods and X-ray photography. These chapters are original and contain complete practical instruction, much of which is not in print elsewhere. The directions are so plainly written out that a beginner can follow them successfully.

The second part of the book reviews the literature bearing upon static electricity, with quite an extended report from Grey's Hospital, where it was successfully used by Golding Bird, Mr. Hughes and Sir William Gull.

To those interested in electricity this volume is to be recommended, but it must always be borne in mind "that the best instrument only does the best work under the guidance of the best hand." The book is nicely printed and well bound. W. C. K.

REFERENCE-BOOK OF PRACTICAL THERAPEUTICS. By various authors. Edited by FRANK P. FOSTER, M. D., Editor of the New York Medical Journal and of Foster's Encyclopedic Medical Dictionary. In two large octavo volumes. Volumes I. and II. Pp. vii.—632 and 618. New York: D. Appleton & Co. 1897.

This work is encyclopedic in character and the signature of each contributor is appended to his offering. It is not intended to supplant the text-books on materia medica, pharmacy or therapeutics, but its object is rather to supplement these by placing in the hand of the practising physician a list of his therapeutic armamentarium alphabetically arranged. We use the word list advisedly; we do not mean to be understood thereby, however, that drugs, medicines and therapeutic appliances are only mentioned in this treatise by name. Far from it. In most instances chemical formulæ or botanical histories are given, the nature of the products described, their therapeutic application detailed, and in case of poisons, antidotes and curative management are set forth.

To do all this requires two imperial double-columned octavo volumes of 650 pages each, which indicates the magnitude of the work. Moreover, it is printed in fine type, yet with such a clear face that it does not tax the eye even of advanced age to find and read all the practical information necessary on a given subject. But, withal, the editor has mastered the task of presenting to us in most approved form the essential information of all remedial agents that are in vogue. He has drawn upon current periodic literature extensively wherever necessary to elaborate his subject, which adds very much to its interest as well as practical importance.

It is not a treatise for the student, but it is essentially a work for the practical and practising physician—for the family doctor, the consultant and the specialist. All these may daily consult these volumes with advantage. The specialist must always know the action of remedies and those best adapted to his patient; for even if he does not prescribe them he must not be ignorant on the subject nor fail to appreciate the proper work of him whose duty it is to administer or employ internal remedies.

We are unhesitatingly of the opinion that this treatise will easily become the most popular reference-book in a physician's library, and that to be without it is to miss the most practical and useful work on therapeutics extant.

CLINICAL LESSONS ON NERVOUS DISEASES. By S. WEIR MITCHELL, M. D., LL. D., Edin., Member of the National Academy of Sciences; Honorary Fellow of the Royal Medico-Chirurgical Society of London. Handsome 12mo. 299 pages, with illustrations and two colored plates. Cloth, $2.50. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

The present volume is the work of a careful, painstaking observer, who finds two great reasons for bringing forth a book on this subject. First, the great importance of the subject; and,

second, that although there exists much literature on the subject, scattered through the medical press, yet there is no recent book in English devoted to its consideration. The object of the work is to give the general practitioner a careful, concise statement of the symptomatology, the differential diagnosis and the various therapeutic measures that have been found useful in the treatment of these disorders. It will not be amiss to state at the outset that the author has succeeded admirably in his undertaking.

The historical consideration of hysteria has always been a most interesting one and the several epidemics of hysteria, breaking out among the numerous races, at various intervals, is instructive reading.

Under the head of symptomatology, the author takes up the (1) disturbances of sensation; (2) disturbances of motion; (3) vasomotor, visceral and nutritive disturbances; (4) mental symptoms, and (5) the large number of miscellaneous symptoms which do not come under either of the foregoing classes.

The treatment is what must interest the general practitioner, and if he follows the instructions given by the author he cannot fail to get good results.

The work is admirably gotten up, the illustrations are excellent and, on the whole, is a valuable addition to neurological literature.

W. C. K.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Volume IX. for the year 1896. Standard 8vo. pp. viii.—456. Edited by the secretary, William Warren Potter, M. D. Philadelphia: William J. Dornan. 1897.

In this volume is printed the proceedings, papers and discussions of the Richmond meeting, September 22–24, 1896, under the presidency of Dr. Joseph Price. It is a picture of clinical work in the consulting room, at the bedside and at the operating table for a year, by a group of progressive, earnest men, who succeed in making the most interesting volume of society transactions that we have seen.

The book is well printed, profusely illustrated and substantially as well as handsomely bound, and ought to be in possession of every abdominal surgeon, obstetrician and gynecologist in America.

ATLAS AND ESSENTIALS OF GYNECOLOGY. By DR. OSCAR SCHAEFFER, University of Heidelberg. Sixty-four full-page chromo-lithographic plates, comprising 159 figures; with descriptive text facing the plates and over 300 pages of introduction and treatise, illustrated with wood-engravings. (Wood's Medical Hand Atlases, Volume V.)

In this Atlas the author has combined schematic drawings with those taken from nature and has succeeded in plainly emphasising many variations from the normal that many other works leave

obscure or only partially understood. In doing this he has drawn largely upon material that he obtained when assistant at the gynecological clinic at Munich. The work is divided into two parts—first, plates and their explanation ; then text with wood-cut illustrations.

Schaeffer has succeeded in presenting a volume of great beauty that will materially aid in the elucidation of many gynecological subjects and one that will readily become a work of great supplemental force in the hands of the gynecologist.

Its moderate price will easily commend it to the general practitioner, who must of necessity have an intelligent knowledge of ordinary gynecologic subjects.

HYSTERIA AND CERTAIN ALLIED CONDITIONS. Their Nature and Treatment, with Special Reference to the Application of the Rest Cure, Massage, Electrotherapy, Hypnotism, etc. By GEORGE J. PRESTON, M. D., Professor of Diseases of the Nervous System, College of Physicians and Surgeons, Baltimore ; Visiting Physician to the City Hospital, etc., etc. Small 8vo, pp. 298. Illustrated. Philadelphia : P. Blakiston, Son & Co., 1012 Walnut street. 1897.

This volume consists of a series of eighteen clinical lectures by the scholarly and well-known author at his private hospital at Philadelphia. The different subjects treated are hysteria, recurrent melancholia, irregularly recurrent melancholia, disorders of sleep, choroid movements in an adult male, subjective false sensations of cold, motor ataxia in a child, post-hemiplegic pain, the treatment of sciatica, erythromelalgia, notes on surface temperature, three cases of remarkable spinal anterior curvature, with mental aberration, concerning the history of the discovery of reflex ocular neuroses and the extent to which these reflexes obtain, wrong reference of sensations of pain, pseudocyesis, hysterical contractures, rotatory movements in the feeble-minded.

The subjects enumerated show what a rich supply of material is treated and especially as the majority of the cases are out of the ordinary run. W. C. K.

WARNER'S POCKET MEDICAL DICTIONARY OF TODAY. Comprising Pronunciation and Definition of 10,000 Essential Words and Terms used in Medicine and Associated Sciences. By WILLIAM R. WARNER. Philadelphia : William R. Warner & Co. 1897.

Small dictionaries are often very convenient and this one, giving 10,000 words, most of which are in everyday use, is one of the best of its kind. There are numerous minor errors, many of which are attributable to faulty proof-reading and some to condensed definitions. Nevertheless, it is a book that possesses merit ; its letter-face is plain, diphthongs have been omitted wherever practicable and it admirably fills the place for which it is intended—namely, the pocket.

BOOKS RECEIVED.

A Text-Book of Diseases of Women. By Charles B. Penrose, M. D., Ph. D., Professor of Gynecology in the University of Pennsylvania; Surgeon to the Gynecean Hospital, Philadelphia. Octavo, pp. 529. Price, $3.50, net. Illustrated. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

System of Diseases of the Eye. By American, British, Dutch, French, German and Spanish authors. Edited by William F. Norris, A. M., M. D., and Charles A. Oliver, A. M., M. D., of Philadelphia, Pa. Volume II. Examination of the Eye, School Hygiene, Statistics of Blindness and Antisepsis. Octavo, pp. ix.—556. With thirteen full-page plates and 214 text illustrations. Philadelphia: J. B. Lippincott Co. 1897.

Text-Book on Mental Diseases. By Theo. H. Kellogg, A. M., M. D., Late Medical Superintendent of Willard State Hospital, etc., etc. Octavo, 792 pages; illustrated by original sphygmographic tracings and photographs of the different types of mental disorder. Extra muslin, $6.00.

Eye-strain in Health and Disease. With Special Reference to the Amelioration or Cure of Chronic Nervous Derangements Without the Aid of Drugs. By Ambrose L. Ranney, A. M., M. D., Author of Lectures on Nervous Diseases, The Applied Anatomy of the Nervous System, etc., etc.; Late Professor of Nervous Diseases in the Medical Department of the University of Vermont and of the Anatomy of the Nervous System in the New York Post-Graduate Medical School, etc. Illustrated with thirty-eight wood-cuts. One volume royal octavo, pages, viii.—321. Extra cloth, beveled edges, $2.00, net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street. New York: 117 W. Forty-second street. Chicago: 9 Lakeside Building.

Flint's Medical and Surgical Directory of the United States and Canada. Issued annually. 1897. Compiled by A. L. Chatterton. New York: J. B. Flint & Co., 104 Fulton street. 1897.

A System of Practical Medicine. By American authors. Edited by Alfred Lee Loomis, M. D., Late Professor of Pathology and Practical Medicine in the New York University, and William Gilman Thompson, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine in the New York University. To be completed in four imperial octavo volumes, containing from 900 to 1,000 pages each; fully illustrated in colors and in black. Volume I. Infectious Diseases. Just ready. Volume II. Diseases of the Respiratory and Circulatory Systems and of the Blood, Kidneys and Genito-urinary Organs. Just ready. Volume III. Diseases of the Digestive System, of the Liver, Spleen, Pancreas and other Glands; Gout, Rheumatism, Diabetes and other Constitutional Diseases. In Press. Volume IV. Diseases of the Nervous System and of the Muscles; Diseases of doubtful origin, Insolation, Addison's Disease, etc. In active preparation. For sale by subscription. Per volume, cloth, $5.00; leather, $6.00; half-morocco, $7.00. Philadelphia and New York: Lea Brothers & Co., Publishers.

Literary Notes.

The *Medical Record*, according to its annual custom, devoted its issue of June 12, 1897, to a consideration of summer health resorts, publishing a special article on that subject, ten pages and a half long, besides innumerable advertisements. This was a large and handsome number of this always enterprising magazine.

The Buffalo State Hospital has lately issued its twenty-sixth annual report, which covers the year ending September 30, 1896. During this period there has been an increase in the population of the institution of 53 men and 210 women, total 263. Of this number, however, 207 were transfers of chronic cases from other institutions. The hospital accommodations have been enlarged during the year and its affairs are in a progressive and satisfactory state.

The Manhattan Eye and Ear Hospital reports, Volume IV., January 1897, is an interesting brochure of about 100 pages, containing twenty papers by leading ophthalmologists, otologists and laryngologists, among whom are Drs. D. B. St. John Roosa, David Webster, Frank Van Fleet, M. D. Lederman and Charles H. Knight. It is printed by the Knickerbocker press (G. P. Putnam's Sons,) and it is needless to add that the mechanical execution is of the best.

The *New Orleans Medical and Surgical Journal* celebrated its fiftieth anniversary by issuing a souvenir number for July, 1897. This journal was established in 1844, but suspended publication during the civil war, hence its fiftieth volume began with its jubilee number as indicated.

It is a magazine that always has been conducted with dignity and honor, never lowering the standard of medical propriety, and always contributing something toward the advancement of medical science. Its present editors point with just pride to this circumstance and they are entitled to receive the congratulations of their contemporaries throughout the United States on this honorable record. We observe with pleasure that this veteran magazine will prove its youthful vigor by revising its orthography, eliminating diphthongs wherever practicable, and otherwise place itself in the front rank of modern medical magazines. Our best wishes go out to our New Orleans contemporary for its continued success as a representative magazine.

THE first report of the board of managers of the Second Hospital for the Insane of the State of Maryland, gives a history of the establishment of what promises to be the most famous institution of its kind in the country. It has been established at "Springfield," near Sykesville, the old Patterson homestead, and it was from this mansion that Elizabeth Patterson, according to tradition, made her escape at night and rode on horseback to Baltimore, accompanied only by her negro groom, where she met Jerome Bonaparte at the famous ball and whom she soon afterward married.

It is an ideal location for a hospital; there is a succession of hills upon which to erect the buildings, giving natural drainage and the purest air, and the superintendent, Dr. George H. Rohé, has the knowledge and experience to put all these natural advantages to the best possible use in the construction and maintenance of a great state hospital for the insane.

THE *Indiana Medical Journal*, one of the best of our contemporaries, is always a welcome visitor. We often quote it and find it generally so sound on all important questions that we are pained to feel impelled to utter a word of criticism. We are surprised to find in its last issue an editorial that speaks in commendation of "yellow medical journalism." If there is anything that should bring the profession of medical journalism to blush and cause the American Medical Editors' Association to weep, it is that kind of periodic literature, to the consideration of which our Indiana contemporary devotes an editorial page, and which will be regarded in the light of a "boom." We do not believe that such was the intent; nevertheless, it will assuredly become so in effect.

THE *American X-ray Journal* made its appearance in May, 1897. Dr. Heber Robarts is the editor, and it hails from St. Louis. We fail to discover a substantial *raison d'etre* for this special line of journalism.

THE *Medical Register* is the name of a new journal that appeared in May, 1897. It is issued monthly under the auspices of the faculty and society of alumni of the Medical College of Virginia. It is edited by E. C. Levy, M. D., and Drs. John M. Upshur and Lewis C. Bosher constitute the advisory committee from the faculty. The office of publication is 826 East Main street, Richmond, Va.

W. B. Saunders, Esq., medical publisher, 925 Walnut street, Philadelphia, announces for publication during autumn and early winter the following book-list: An American text-book of genito-urinary and skin diseases, edited by L. Bolton Bangs, M. D., late professor of genito-urinary and venereal diseases, New York Post-Graduate Medical School and Hospital, and William A. Hardaway, M. D., professor of diseases of the skin, Missouri Medical College. An American text-book of diseases of the eye, ear, nose and throat, edited by G. E. de Schweinitz, M. D., professor of ophthalmology in the Jefferson Medical College, and B. Alexander Randall, M. D., professor of diseases of the ear in the University of Pennsylvania and in the Philadelphia Polyclinic. Macdonald's surgical diagnosis and treatment, by J. W. Macdonald, M. D., graduate of medicine of the University of Edinburgh; licentiate of the Royal College of Surgeons, Edinburgh; professor of the practice of surgery and of clinical surgery, Minneapolis College of Physicians and Surgeons. Anders' theory and practice of medicine, by James M. Anders, M. D., Ph. D., LL. D., professor of the theory and practice of medicine and of clinical medicine, Medico-Chirurgical College, Philadelphia. Senn's genito-urinary tuberculosis, by Nicholas Senn, M. D. Ph. D., LL. D., professor of the practice of surgery and of clinical surgery, Rush Medical College, Chicago. Penrose's gynecology, by Charles B. Penrose, M. D., professor of gynecology, University of Pennsylvania. Hirst's obstetrics, by Barton Cooke Hirst, M. D., professor of obstetrics, University of Pennsylvania. Moore's orthopedic surgery, by James E. Moore, M. D., professor of orthopedics and adjunct professor of clinical surgery, University of Minnesota, College of Medicine and Surgery. Heisler's embryology, by John C. Heisler, M. D., prosector to the professor of anatomy, Medical Department of the University of Pennsylvania. Mallory and Wright's pathological technique, by Frank B. Mallory, A. M., M. D., assistant professor of pathology, Harvard Medical School; assistant pathologist to the Boston City Hospital; and James H. Wright, A. M., M. D., instructor in pathology, Harvard Medical School; pathologist to the Massachusetts General Hospital.

New volume in Saunders' aid series: Sutton and Giles' diseases of women, by J. Bland Sutton, F. R. C. S., assistant surgeon to Middlesex Hospital, and surgeon to Chelsea Hospital, London; and Arthur E. Giles, M. D., B. Sc., Lond., F. R. C. S., Edin., assistant surgeon, Chelsea Hospital, London.

THE *Columbus Medical Journal* devoted its issue of April 27, 1897, to the Association of Military Surgeons, that held its annual meeting at Columbus during the month of May. It is as handsome a speeimen of medical journalism as we have seen in many a day. It is printed on fine book-paper and contains 42 engravings, for the most part half-tones of officers of the association and scenes in and about Columbus.

THE *Northern Druggist* is the new name of what was known as the *Buffalo Druggist*. We fail to understand or appreciate the propriety of this change in name, for we think Buffalo is a pretty good first name for a magazine or newspaper, medical or lay. However, if our friends of the *Druggist* are satisfied we need not complain.

THE *Pittsburg Medical Review*, that sterling representative of honorable medicine, has been transformed into the official organ of the medical society of the State of Pennsylvania and rechristened the *Pennsylvania Medical Journal*. The *Review* was too good a magazine to become an "organ," but the Pennsylvania society could not have selected a more worthy mouth-piece.

Items.

THE ATTACK ON VIVISECTION.—At the meeting of the American Medical Editors' Association, held at Philadelphia, this subject was discussed and a protest was made against the passage of senate bill 1063, which is entitled For the further prevention of cruelty to animals in the district of Columbia. The bill, under an apparently inoffensive title, endeavors, under the guise of a local measure, to control all experimentations upon animals of whatever nature, and it will, if enacted, prohibit almost absolutely certain lines of experimentation and materially restrict others, both of which we, as scientific men, deem absolutely necessary for the advancement of medicine. The bill is opposed by all of the important scientific bodies in the United States for the reasons: First—Further legislation is unnecessary, the provisions of existing law being sufficient to entirely prevent such cruelty as is mentioned in the bill. The promoters of the bill do not attempt to show that any cruel or unnecessary procedures have been, or are being, performed within the district. Second—The voice of science and

medicine is opposed to legislation of any kind which would take in any measure the direction or control of experimental medicine and physiology out of the hands of those who, on account of their special fitness, have been chosen by the authorities of our higher institutions of learning and of research to convey instruction and to conduct investigations at those institutions.

An army medical board will be in session at Washington City, D. C., during October, 1897, for the examination of candidates for appointment to the medical corps of the United States army to fill existing vacancies. Persons desiring to present themselves for examination by the board will make application to the secretary of war before September 1, 1897, for the necessary invitation, giving the date and place of birth, the place and state of permanent residence, the fact of American citizenship, the name of the medical college from which they were graduated and a record of service in hospital, if any, from the authorities thereof. The application should be accompanied by certificates based on personal acquaintance from at least two reputable persons as to citizenship, character and habits. The candidate must be between 22 and 29 years of age and a graduate from a regular medical college, as evidence of which his diploma must be submitted to the board. Successful candidates at the coming examination will be given a course of instruction at the next session of the Army Medical School, beginning November 1, 1897. There are five vacancies in the corps to be filled. Further information regarding the examinations may be obtained by addressing Brig.-Gen. George M. Sternberg, M. D., surgeon-general U. S. army, Washington, D. C.

The Grand Army of the Republic, in preparing for its encampment to be held in Buffalo during the week beginning August 23, 1897, has to provide for the efficient medical and surgical care of the visiting comrades—not a trifling matter as all previous experience would go to prove.

The general committee at the outset placed Dr. Ernest Wende, health commissioner, at the head of the medical department, and he has appointed 200 physicians to assist in the work. The executive medical staff is as follows: Ernest Wende, medical director; William Warren Potter and Henry Reed Hopkins, assistant medical directors; Albert H. Briggs, director of hospitals; Walter D. Greene, director of sanitation; Geo. W. York,

director of ambulances; Chauncy P. Smith, executive officer and secretary to the committee.

The executive staff is holding weekly meetings (on Wednesdays) at Grand Army headquarters in Ellicott Square and is putting forth plans to give a prompt and efficient medical service to the visiting comrades. Hospitals will be established at appropriate points, with thorough equipment and experienced medical officers and nurses. Ambulances will be at quick command, sanitary inspection will prevent unnecessary sickness, sanitary water-closets will be placed at convenient points, and during the parade the service will be rendered as complete as it is possible for human judgment and precaution to establish.

A DELEGATION of Mexican physicians, en route to the Moscow Congress, passed through Buffalo Sunday evening, July 25, 1897. They were accompanied in many instances by members of their families, and the party altogether numbered fifty-three, in charge of Mr. E. O. Matthews, special representative of the Mexican Central Railway. Among them are Dr. E. Lavista, president of the Mexican Medical Association, with his wife and three children; Dr. Eduardo Licéaga, with his wife and four children; Drs. Bernaldez, Gavino, Prieto, Garua Diego, Carraza and wife, Domingo Orvanoz and Miss Orvanoz, Jose Morales and Miss Morales, Chavez, Carmona y Valle, Sosa y Gomez, Luis Caimona, Tejeda and wife and two daughters, Vallejo, L. Garibi, F. Garibi and Alonso.

Dr. Licéaga will be remembered by many Buffalonians as the genial president of the American Public Health Association during its meeting in this city last year. This entire party sailed from New York Thursday, July 29th, on the Normannia, and expects to reach Moscow August 13th, five days before the beginning of the Twelfth International Medical Congress.

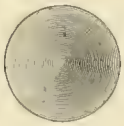
GOVERNOR TANNER, of Illinois, proved himself a friend of legitimate medicine when he affixed his veto to the so-called "osteopathy bill," that passed the Illinois Legislature at its last session. The profession of medicine should everywhere gratefully remember Governor Tanner's action.

THE Clinical Society, of Louisville, in conjunction with other physicians of prominence, tendered a banquet, June 22, 1897, to a

number of distinguished physicians of that city who had recently been elected or appointed to office in state and national medical organisations. The names of the guests are as follows; Dr. George W. Griffiths, Surgeon-General Kentucky State Militia; Prof. Joseph M. Mathews, M. D., president-elect of the Kentucky State Medical Society and first vice-president elect of the American Medical Association; Prof. William L. Rodman, M. D., chairman of the section on surgery and anatomy in the American Medical Association, and Prof. William Bailey, M. D., vice-president-elect of the National Confederation of State Medical Examining and Licensing Boards. The banquet was presided over by Dr. Bailey, and according to the *American Practitioner and News* the viands and the potations were fitted to the medical gustatory sense, and the "feast of reason and flow of soul" engendered by the occasion was ordered as follows:

Professional fellowship, Dr. William Bailey; The American medical association, Dr. J. M. Mathews, vice-president—response by Dr. L. S. McMurtry; The surgeon-general of Kentucky, Dr. George W. Griffiths—response by Dr. I. N. Bloom; The surgical section, A. M. A., Dr. William L. Rodman, chairman—response by Dr. A. M. Cartledge; The medico-chirurgical society, Dr. J. B. Marvin; The clinical society, Dr. T. P. Satterwhite; The surgical society, Dr. H. H. Grant; Medical journalism, Dr. H. A. Cottell; The Mississippi Valley medical association, Dr. T. H. Stucky.

The Sweetwater Hotel, Hayden Park, Bedford Springs, Mass., was thrown open for guests June 1, 1897. It is a beautiful and substantial house and its proximity to Bedford Mineral Springs makes it a delightful place for summer rest and recreation.



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Original Communications.

PUERPERAL ECLAMPSIA: ITS ETIOLOGY AND TREATMENT.[1]

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Examiner in obstetrics, New York State Medical Examining and Licensing Board; Fellow of the American Association of Obstetricians and Gynecologists.

THE consideration of puerperal eclampsia has been practically a closed book for the past few years, but now, all at once, following the lead of the German school and a few others, a veritable epidemic of society papers and magazine articles has burst upon us. We seem to have arrived at a period that may fittingly be called the renaissance of eclamptic literature, though it is doubtful if great progress is making either in solving problems of causation or treatment of this baneful malady. Nevertheless, it will not answer for this society to keep silent on so important a subject when it seems to be in fashion to discuss it.

Eclampsia ever has been since the birth of the obstetric art one of the most direful calamities that can befall a pregnant woman. There is only one other complication of the lying-in room that approaches it, and that is postpartum hemorrhage. Under present methods, however, the latter has ceased in general to appal the experienced obstetrician, yet the beginner may well regard both hemorrhage and eclampsia as the twin spectres of obstetric practice—the *bêtes noires* of the parturient. While, therefore, nowadays the trained obstetrician expects to deal successfully with postpartum hemorrhage, and may, speaking generally, give a favorable prognosis, not so in eclampsia. Here he is as doubtful of the prognosis as ever, because he can never be certain that the fits may not be renewed, even fatally, until evidences of toxemia have declined and convalescence is well under way. The disappointments and surprises, too, that follow in the trail of eclampsia

1. Read before the Medical Society of the State of New York, at Albany, January 26, 1897.

justify the most guarded prognosis and prompt always a feeling of uncertainty even in the most optimistic minds.

Now, as ever, the pathogenesis of eclampsia is unsettled. It is not a pathologic entity—only a group of symptoms which is named eclampsia, and which varies in intensity all the way from hysterical twitchings to tetanic spasms and coma. Of one fact, however, we are all now certain—namely, that eclampsia is a condition *sui generis*, that it pertains to the puerperal state alone and is found under no other condition. It has no parallel and is not produced any where in the human economy except in the pregnant woman, or immediately after delivery; the convulsions are reflexes excited by cerebro-spinal, or medullary irritation of a toxemic origin; and anemia as well as plethora is conducive to eclampsia.

The early teachings which recognised and described three varieties of eclampsia—hysterical, epileptic and apoplectic,—were erroneous as to pathology and causation as well as misleading in treatment.

In searching for the causes of eclampsia the kidney has always been looked upon with extreme suspicion by a great majority of investigators. It is the duty of the kidneys to eliminate toxins, and if these organs fail in their office unmistakable symptoms are promptly presented in the pregnant woman. These prodromes are manifested in various ways, the leading or most pronounced being headache, puffiness of the eyelids, local and general edema, scanty and albuminous urine. Renal insufficiency, either in quantity or quality, or both, is an almost universal accompaniment of the eclamptic state. Indeed, anurea is often a forerunner of the fits. But the kidney is only a servant,—in the majority of instances, too, healthy in itself,—performing its duties, however, in a faulty manner. It has perhaps been asked to perform excessive labor because of an over-production of toxic material; again by reason of mechanical pressure on its emulgent veins it finds itself embarrassed in its work, or, finally, it may be the seat of parenchymatous change. In any event the kidney plays an important part in the economy of the eclamptic; it is a sentinel stationed at an important gateway which must challenge every toxic element that approaches and eliminate it with promptitude.

In case of over-production of toxins and under-elimination by the kidney, the road is a short one to the eclamptic seizure. The degree of intoxication regulates the severity of the attack, while the nature of the soil in which the toxic elements are sown governs

the quality of the seizure. Some women are easily influenced by the eclamptic toxins, while others resist them to the last extremity. In this latter class prodromata are frequently noted and eclampsia is prognosticated, but it rarely comes, or if it does, it is more readily overcome by appropriate measures. I wish it were possible in the present state of our knowledge to fix or differentiate precisely what these mysterious toxins are. If their source, even, were better understood we might do more efficient work in their elimination. It is probable, in my view, that they come in large groups from the intestinal tract, either the result of putrefaction or waste; that they enter the blood in excess of what the kidneys can eliminate, finally causing eclampsia in those women whose systems are easily wrought upon by this group of phenomena.

It is a well-known fact that pregnancy causes a modification of woman's economy often to an extreme degree. It exaggerates her nervous force and diminishes her resisting power; it perverts her mental stamina and lessens her physical energy. The functions of organs whose province is especially to eliminate toxins and so preserve health, are now so disturbed as to prevent the exercise of their offices to their full extent, hence she easily falls a prey to toxemia.

I attach very little importance to the mere presence of albumin in the urine of a pregnant woman, except as a warning that should induce careful watchfulness. How many women with albuminuria escape eclampsia? and, again, how many eclampties fail to exhibit albuminous urine? Yet it must not be forgotten that a large percentage of albumin means less elimination of toxins, and such a state may become, under favoring conditions, the avant-courier of an eclamptic seizure of maximum intensity.

I shall not take time in this presence to discuss the microbic theory of eclampsia, for it is a proposition that remains to be demonstrated. Moreover, if in the present state of our knowledge we adhere to the belief that toxemia is a causative factor we shall find ourselves on more substantial foundations as to successful treatment.

Treatment.—In order to arrive at an intelligent treatment there must be a clear understanding of the conditions we are called upon to treat. Let it be understood, then, that we are dealing with a subtle toxemia not yet understood as to origin or material, nor even as to its *modus operandi*, but still one that arises from ingesta,

intestinal putrefaction and fetal metabolism, one or all, and that the organs of elimination are either sluggish or suspended in action. Symptomatically we usually have to contend with severe headache, edema, albuminous and scanty urine, diminished urea excretion; and, finally, cyanosis, convulsions and coma, or semi-coma. The first group of symptoms pertain to the preëclamptic state and the last to true eclampsia.

Again, the woman may be anemic or plethoric, young or middle-aged, a primipara or multipara and the symptoms grave or moderate in their manifestations. Finally, the eclamptic seizure may be antepartum, intrapartum or postpartum. All these factors serve to modify or control the plan of the treatment to be proposed in a given case.

The treatment of eclampsia, too, should be classified into (*a*) preventive and (*b*) curative. The preventive treatment may be subdivided into medicinal and hygienic, and the curative into medicinal and obstetric.

The preventive treatment of eclampsia affords an interesting field in which the clinician may display his talent and ingenuity in the application of hygienic measures and drugs to avert an impending danger of the gravest import. Given a pregnant woman in the seventh or eighth month with the prodomes of eclampsia, that is to say, who manifests the phenomena incident to the preëclamptic state, and what shall be done?

Manifestly, the first duty will be to interrogate the kidney as to its sufficiency and integrity. A qualitative and quantitative analysis of the urine hence must be made at the outset. Albuminuria is not a reliable symptom of renal disease or insufficiency, nor is a scanty twenty-four hours' output an unfailing index of kidney failure; nor yet is a diminution of urea excretion an infallible indication of approaching eclampsia. Exceptionally all of these conditions may coëxist and yet eclampsia not result. These are indications singly and collectively that there is existing toxemia, that there is defective elimination and that something must be done to correct a faulty relationship between nutrition and excretion.

If the prodomes and the physical signs are recognised early, it may be expected with reason that hygiene and medicine will correct the errors that are so rapidly tending toward eclampsia. Air, food and drink must be supplied in ample quantities and of good quality; so, too, must we insist upon exercise, active or passive—walking, driving, light calisthenics or massage, according to the

taste or tolerance of the patient. These are all good agents to employ, but the object sought should be to limit the source of toxins that are being absorbed and to promote their elimination.

One of the surest ways in which to control the supply of toxins appears to be, from abundant testimony, to place the woman upon an exclusively milk diet. This will serve at once not only to diminish the supply of toxins, but to increase the fluids of the body, flush the kidneys and favor the elimination of toxic material. Water, too, should be freely given in definite quantities and at regular intervals. I speak from a considerable experience when I say that distilled water is one of the best diuretics that can be administered to a woman in the eclamptic state. Two quarts a day is not too much and it may be given still or charged, according to the taste or desire of the patient.

The bowels of the preëclamptic, too, demand supervision. Constipation must not only be prevented, but intestinal toxins must be unloaded, and the intestinal tract kept free. These are common-place observations perhaps, but they are essentials that cannot be omitted in a consecutive clinical picture of the management of a woman with eclamptic prodromes. Drugs are not specified in kind, but each physician will invoke the aid of an intelligent pharmacology. It should be remembered, however, that forcing the kidneys without supplying copious fluids is to be reprehended. Potassium salts that have been so frequently employed, and as I believe to the detriment of eclamptic patients, should be avoided. They favor the production of intestinal toxins, and beside tend to diminish red blood corpuscles—an element that must be conserved.

There are two other remedies of which I wish to speak just here, for they belong to the therapeutics of the condition we are discussing, that is, the preëclamptic state. These are blood-letting and glonoin. If there is a full artery at the wrist with a tendency to cyanosis in the preëclamptic, venesection may be resorted to with benefit. One good full bleeding is permissible, but it should be used with caution in repetition. I fear its employment during an eclamptic seizure, but here it is admissible, and in selected cases it will often prove beneficial. If there is high arterial tension—vasomotor spasm—glonoin in full doses is a valuable remedy. It combats this condition without depleting the patient, and, moreover, helps to set the kidney to work. Let us now dismiss the preëclamptic state and consider the treatment of true eclampsia.

Suppose a physician is summoned as a consultant in a case where convulsions have already set in, what is to be done? Here let us recall the three forms of eclampsia, (*a*) antepartum, (*b*) intrapartum, (*c*) postpartum. The treatment will be, first, medicinal and, second, obstetric. The first indication of treatment in antepartum eclampsia is to control the convulsions. An attempt wisely enough may be made to do this through the administration of chloroform by inhalation as well as the administration of chloral by the rectum. An eclamptic woman swallows with difficulty or not at all, as she rarely rouses to full consciousness between the fits. Hence, it is better to administer chloral by the rectum. For my part I would administer chloroform rather tentatively in these cases. If the convulsions were not promptly controlled or diminished in frequency or severity by its vigorous and skilful administration, I should institute measures at once to empty the uterus of its contents; and this brings us face to face with the most interesting question in the obstetric management of puerperal eclampsia.

A considerable experience has convinced me that a prompt evacuation of the uterus constitutes the most important method of dealing with eclampsia. While the womb remains gravid we are hampered in our therapeutics. Two lives are at stake and in our anxiety to preserve both we may save neither. By addressing ourselves assiduously to a speedy delivery of the fetus we contribute in the largest manner to the conservation of both lives. With the fetus once delivered there is a freer opportunity to deal with the woman in the most masterful or even heroic manner. Fortunately eclampsia rarely occurs until the fetus has reached the period of viability; hence its speedy delivery becomes its greatest safeguard; for every hour increases its liability to death from maternal toxemia, as well as diminishes its chances of survival after premature delivery.

How many times has the fetus been destroyed by prolonged chloroform anesthesia, full morphinism, or extreme chloralisation? One or all of these means, to be sure, may be used with comparative safety to the mother if the fetus is out of the way. How often, too, has the fetus succumbed to prolonged intoxication from the mother's blood?

If I am called to an eclamptic woman who is within a month of term I lay down as a cardinal principle for my own guidance that it is my duty to proceed with all diligence to effect delivery. Why should not this be done? Will any one tell us why it is not

good obstetric practice to proceed to aid nature in the accomplishment of her own desires? I regard the appearance of eclampsia as an expression of the economy that it has carried an offending fetus as long as it can be tolerated. The toxemia incident to its presence can no longer be endured without calamitous results, and eclampsia is but an expression of that fact—a danger signal. If we should appeal to statistics they would tell us that the mortality in antepartum eclampsia is seven times greater than in postpartum eclampsia. Surely this speaks in no uncertain fashion commendatory of speedy delivery. But we are told that convulsions do not always cease after delivery. True, but is that a valid argument against the induction of labor? Postpartum hemorrhage does not always cease after the delivery of the placenta and secundines, but who will affirm that it is not proper in such a case to begin the treatment by clearing out the uterus? If convulsions continue after delivery we are now in a better position to push medicinal treatment, if need be, to its extreme limit than before. Purgatives, morphine, chloral, chloroform, diuretics and diaphoretics may all of them be employed with greater expectations and less danger than before delivery.

I have induced labor in a number of instances near the end of the eighth month and always with most satisfactory result. In several of these cases, girls and boys now in the heyday of youth are living to gladden the hearts of mothers also rescued from a desperate strait. In no one instance have I ever regretted the induction of labor, while, on the other hand, I recall a few times in which I blame myself for not invoking its aid. Occasionally, too, I have induced labor where there has been exaggerated preëclamptic conditions without convulsions—edema, albuminuria, semi-coma and impending danger. These also have afforded gratifying results in living children and cured mothers.

Having determined to evacuate the uterus, how shall it be done? There are several methods recommended, but now one and then another seems applicable to a given case. For the most part in antepartum eclampsia, dilatation, first practised with steel dilators, if need be, then with manual stretching of the os and cervix, will accomplish the work to the best advantage. Exceptionally, however, extreme measures may become necessary, but only rarely can the deep incisions of Dührssen be required. So, too, should Cesarean section be reserved for extreme complications like deformed pelvis, or to be done in the interest of the fetus when the mother's

condition seems to be hopeless. In antepartum eclampsia, after obtaining complete dilatation, it is a good plan to terminate labor at once with the forceps under profound anesthesia.

In postpartum eclampsia the treatment must of necessity be medicinal, just as it must also be in the antepartum variety when convulsions continue after delivery. I have purposely avoided including veratrum viride in the group of medicinal agents which I would employ, because I deem it dangerous, uncertain and deceptive in its action. It is but a symptomatic remedy at best, and it has always seemed to me that its employment was analogous to that of antipyretics in typhoid fever or pneumonia. These dangerous drugs seek to reduce the temperature at the expense of cardiac force without in any way exercising any influence over the real course of the disease. So, too, with veratrum in eclampsia. It reduces arterial tension and cardiac pressure without exercising special influence over the progress of the malady. Moreover, it may easily be given to a dangerous degree even by careful hands. I am very much afraid that many cases of eclampsia have succumbed to the indiscreet employment of veratrum, chloroform, chloral and other powerful cardiac depressants ; or, in other words, that these agents, though producing physiological action and apparently controlling the convulsions, yet do so at the expense of the tone and force of the heart-muscle.

Blood-letting for similar reasons should be discreetly employed and, in my opinion, limited to a few cases of the antepartum variety with plethoric habits and manifesting cyanosis. In the medicinal treatment principles are only discussed and not details. These latter will easily be supplied by experienced and well-trained physicians.

There remains one variety of eclampsia to be mentioned—namely, that of pregnancy as distinguished from eclampsia appearing just before, during or after delivery. This form though representing, statistically speaking, the most dangerous variety, nevertheless is one in which there is more time for deliberate action. It is here, too, that medicinal treatment offers better promise, hence the question of evacuating the uterus may be deferred until the other manifests failure or inadequacy.

Premature delivery may be induced in these cases by passing an aseptic bougie well up the fundus uteri externally to the membranes. Its extremity should be coiled within the vagina and retained by antiseptic packing. In a few hours labor will set in

and can then be terminated rapidly if the occasion should so demand. Eclampsia occurs proportionately with greater frequency as the woman advances toward term, and accouchement forcé is more easily put into practice in the antepartum variety.

Finally, to promote the elimination of toxic material the value of diuresis, catharsis and diaphoresis should not be forgotten; neither should the means of the hot-air bath and the hot pack be overlooked. Let me say in conclusion that my aim in this paper has been to present practical experience rather than theoretical views. Hence I have avoided quotations from text-books or magazines, eliminating statistics and omitting tedious reports of cases. Some of my own cases have been published and others have not. Perhaps I may some day group them and give deductions therefrom in a supplementary paper. In this connection I desire to call attention to the fact that two papers have lately appeared on eclampsia that deserve careful study. One of these was presented by Charpentier, of Paris, at the Geneva Congress of Obstetrics and Gynecology in September, 1896. This paper antagonises very forcibly the practice of speedily emptying the uterus as a primary resource. The other paper by Clifton Edgar, of New York, published in the *Medical Record*, December 26, 1896, takes the opposite view, advocating the evacuation of the uterus as a principal means of cure. Both of these papers are masterful presentations of divergent views on this point.

I desire to array myself on the side of Edgar, with whom I agree upon all essentials in his dissertation. His views correspond more nearly with my own experience. His paper is a decided contribution to the literature of eclampsia.

284 Franklin Street.

OXYGEN, IRON AND THE SPINAL ICE BAG IN THE TREATMENT OF ANEMIA.

By BEVERLEY O. KINNEAR, New York.

THE second of these remedies is considered, doubtless, by the majority of the profession as the most efficient medication in anemia, and as a single agent it appears to be the one which has been more universally given than any other and from which the best results have been obtained.

It is the desire of the writer—in a concise paper—to lay before the profession some reasons which denote to him, not without much cogency, why the combination of the three above-mentioned

remedies should meet the indications of this disease better than iron alone, or oxygen, or the spinal ice bag alone or in combination. The three prominent factors in anemia are: decrease in the number of the red corpuscles of the blood; a lack of normal warmth in the extremities, demonstrated by the chronically cold hands and feet; and a feeble pulse, yet constant excitability of the nervous system. The first is an indication for the use of iron, the second denotes the craving of the tissues for a larger supply of oxygen and the third implies systemic weakness and excitement of the brain and nerve centers. The sympathetic ganglia are evidently functioning with undue force, as shown by the cold surface of the body.

If we can, at the same time, increase the number of the red corpuscles, dilate the systemic arteries and thoroughly oxidise the blood and tissues, will we not be adding effective force to force and thus much more rapidly ameliorate the conditions and cure the disease, than if we either relied upon one of these remedies or used only one at a time? There is nothing incompatible in their conjunction. Oxygen by the lungs, iron by the stomach and the mechanical action of cold over the spine upon hyperemic nerve centers—the first stimulating the cells of all tissues to renewed action and aiding in the assimilation of the food; the second rapidly increasing the number of the red corpuscles and restoring the hemoglobin to the healthy standard and the third dilating the systemic arteries, so that a much larger supply of the reoxygenated blood is carried to every organ, muscle and tissue in the whole body. It appears to us that such a treatment for anemia is about as perfect, with our present light, as treatment can be.

In acute anemia, after exhausting hemorrhages, we would not advise the use of the spinal ice bag, except in the hands of an expert, but rather the inhalation of oxygen alone to restore the vital powers, quiet the pulse and improve the nutrition. After all danger of hemorrhage has passed, then the spinal ice bag of twenty-two inches in length, and placed over the spine from the fourth cervical to the third lumbar vertebra, may be added with much benefit, as well as the internal administration of iron.

In acute anemia we have cold sweats, great pallor, rapid, feeble pulse, easily excited by mental or bodily exertion to greater speed, pinched features and a blowing cardiac murmur. There are prominent nervous symptoms, delirium, tinnitus aurium and the like, and there is intense thirst.

Cases of this kind can be more speedily relieved by the inhalation of oxygen than by iron or by the spinal ice bag, but may be followed, as the patient improves, by the use of both, in order to hasten and perfect the cure.

Dr. John V. Shoemaker, in his treatise on materia medica and therapeutics, says of oxygen:

> It first quickens, then slows the pulse, but makes it fuller and rounder. In addition, there is evidence in the lips and finger nails of increased oxygenation of the blood, and cicatrising wounds and granulation tissues were observed by Demarquay to become more ruddy. The digestion and appetite improve, with increased assimilation and resulting physical strength. Expiration of carbon dioxide is largely increased. In chronic cachectic states it improves assimilation by building up of the system.

The description here given demonstrates that metabolic changes become much more rapid during oxygen inhalation, and as an after-effect also; therefore the processes of repair and waste are soon brought to the normal.

The very same results as above given we have obtained in many chronic anemic cases by the application of the spinal ice bag alone, illustrating thereby the similarity of action of oxygen by inhalation and the cold applications. Cold over the spine dilates the arterioles throughout the body, generates heat within the body at the same time and deepens respiration, therefore supplies more air, and therefore more oxygen to all the tissues of the body, but these results are gradual and can be much hastened by the use of iron and oxygen at the same time.

In the discussion following the reading of a paper at the Academy of Medicine, New York, by Professor W. Gilman Thompson, in May, 1889, Dr. J. West Roosevelt stated "that in the simple anemia of girls he found the patients do better under the use of oxygen in connection with the administration of iron than under the iron alone." This statement was confirmed at the same meeting by Dr. Beverley Robinson, of New York. The action of iron alone appears to be not only that of a red corpuscle generator, but to act somewhat similarly to the ice bag, and to the inhalation of oxygen by increasing tissue oxidation, toning the heart, improving the nutrition by its effect upon the circulation, and it is supposed to convert oxygen in the blood into ozone, thus promoting oxidation in muscles, organs and tissues. Thus it may be very easily seen why these three remedies used together will each intensify as

well as supplement the action of the others and thus the more speedily ameliorate the suffering and cure the disease. Upon the administration of iron, that is the particular preparation to be used, we have little to say, beyond the caution: do not use large doses, for very little iron is absorbed and there is much less fear of upsetting the stomach than if large doses be given, especially when the more astringent preparations are prescribed. Upon oxygen and the application of the spinal ice bag we must be much more explicit, as they are little understood by the majority of the medical profession.

Dr. Hayem, professor of therapeutics and materia medica in the medical faculty of Paris, France, says: "The immediate action of oxygen is doubtless to render the action of the heart and the arteries stronger, the remoter effects being an increase in the red color of the blood when pale, and a heightened complexion." To the writer this testimony evidences three very interesting and important points.

The first is the immediate action of the oxygen upon the heart and the arteries, or in other words, its action at once upon the active muscular fiber, or the muscle cell in a state of activity. The arterial system including the heart, or the involuntary muscular apparatus, is always at work independently of our will and the first effect of oxygen, according to this high authority, is upon the involuntary yet constantly active muscular fiber. Thus the immediate action is to strengthen the action of the heart muscle, increasing its contractile power and increasing the nutrition of the organ.

The second point, and it seems to us equally instructive, is the stronger action imparted to the arterial system. This cannot be alone due to the toning of the heart muscle, for we know that there is a *vis a fronte* exerted upon the capillary system, as well as the *vis a tergo*, or the impulsion given to the circulation of the blood by the heart muscle.

What conclusion may we draw, then, from this stronger action of the arterial system? There are two deductions. The first is that the inhaled oxygen being quickly distributed to every organ and tissue in the body, directly stimulates the cells of all tissues to more vital effort, causing a fuller flow of blood through the capillaries, and therefore more natural chemical action between the tissues and the blood, and so an increase of heat and of the reparative processes.

The second is that the oxygen stimulates at once the cerebro-spinal vaso-dilator centers, causing them to function more actively and immediately dilate the arterioles throughout the body. Through physiological experiment we know that when the cerebro-spinal centers or nerves are stimulated, when terminating in the glandular system, the arteries in the glands dilate and there is an increase of discharge from the gland. But Brown-Sequard also demonstrated an increase in the activity of the circulation in the muscle and tissues of the tongue by stimulation of a cerebro-spinal nerve, therefore a dilatation of the arterioles in that organ; and this fact tends to prove that the *vis a fronte* of the capillaries is derived from the central nervous system. We have long believed this latter statement to be true, because by the use of heat over the spine in bronchial inflammations, for example, not only does there result a contraction of the dilated arterioles in the bronchial mucous membrane, but with this relief, there is an immediately responsive action of the mucous glands in the bronchial area, and a profuse and easily expectorated discharge. We have had this result in a large number of patients, the heat stimulating the function of the dorsal sympathetic ganglia (over which it is placed in bronchitis) and thus inducing contraction of blood-vessels in the inflamed mucous membrane, and at the same time stimulating those spinal cells which issue nerves to the nuclei of the mucous membrane cells of the bronchi, resulting in increased discharge from the glands. At least this has been the only explanation which has seemed to us sound; and it is corroborated by physiological experiment, microscopic anatomical research connected with nerve terminals, and the clinical observation of other educated physicians.

The third point of Dr. Hayem's testimony is that the "red color of the blood when pale is increased," and this, it seems to us, can only mean an increase in the red corpuscles and, therefore, a similar result to that following the administration of iron. The inhalation of oxygen, then, is not only indicated in all cases of anemia, but in heart failure and heart disease, whether functional or organic, and also in all cachectic and feeble conditions.

In an interesting paper by Dr. W. T. Baird, read before the Mississippi Valley Medical Association, entitled Oxygen as a heart tonic, he says (1) oxygen is essentially a muscle food; (2) the *active* muscle cell consumes the food. And the conclusion drawn is that the heart first receives the stimulus of oxygen when inhaled.

We cite from his article a most interesting case of anemia treated by oxygen inhalation:

Mrs. B., age 43, multipara, has been a confirmed invalid for two years; is very pale and anemic, suffering from a complication of diseases apparently induced by the unilateral laceration of the cervix uteri, (the cicatrix of which is filled with indurated cicatricial tissue), resulting in various reflex neuroses and profound anemia, with weakness and dilatation of the heart walls. Debility extreme; unable to be up but a few hours each day. Suffers from insomnia and loss of appetite to the extent that food has to be forced upon her. Constant melancholy and intense pressure on the brain; takes no interest in family, and has sexual orgasms many times day and night. Anemic murmurs, plainly heard with first sound of the heart over apex. Pulse 140, weak and irregular. Enough flesh, but it is soft and flabby. I concluded to administer ten gallons of oxygen daily. Commenced with the administration of that amount by inhalation on the 6th day of October last, and in the course of a few days her husband reported that she was resting better at night, rising earlier in the morning, and exhibiting more strength; calling for food for the first time in a year and, in short, manifesting a decided improvement in all her symptoms.

Her heart now (November 17, 1894,) shows but little dilatation, her pulse 120, fuller and softer, and her complexion ruddy. Her sexual orgasms have entirely ceased. She is more cheerful, complains less of her head, and upon examination of the cervix I find cicatricial induration decidedly less, and this accounts for the amelioration in her reflex symptoms, as the peripheral nerves in the cervix are thereby partially set at liberty. This can only be accounted for by an improved circulation, as a result of the improvement in tone in the muscular fibers of her heart, followed by a general toning of the whole system, and the renewal of functional activity in all of its organs.

Our comment upon this case is, that the improvement in the circulation in the womb was probably due to the *vis a fronte* action of the oxygen upon the capillary circulation.

Oxygen, as a therapeutical agent, is but little understood by the medical profession at large. It is a mistake to suppose that ordinary commercial oxygen, such as every calcium light maker manufactures, is a proper agent to be used for therapeutical purposes. It is saturated with chlorine and other deleterious gases, which are injurious to the patient, as they are exceedingly poisonous. Therefore in the employment of oxygen it is necessary to obtain the very best quality. Also we would call attention to the fact that oxygen should never be used alone, even when pure, as it

is too powerful an oxidising agent, frequently exciting irritation, especially in those cases where there is subacute inflammation. It must, therefore, be diluted with an agent of lighter specific gravity than oxygen, and we find nitrous monoxide to be the most valuable for this purpose.

The formula which seems to us to be most suitable in cases of anemia is composed of two parts of pure oxygen, one part of nitrous monoxide, and we consider the addition of a small equivalent of ozone valuable, as it keeps the oxygen fresh. We are in the habit of obtaining oxygen fresh from Dr. Walton's laboratory in New York, where this formula may be obtained, or any other that in the judgment of the physician seems best suited to the case. We find no objection to the use of oxygen compressed in cylinders, provided a small quantity of ozone is used to prevent the gas from rapid deterioration.

The formula referred to is now being used by the London Oxygen Hospital, and we are under the impression that Walton's gas can be obtained almost anywhere from all prominent druggists, although we prefer to obtain the gas fresh from the laboratory in New York. We speak with much emphasis in regard to the formula and the quality of the gas, as both are exceedingly important in order to obtain satisfactory results.

Some physicians are reluctant to employ oxygen, as they hesitate to order it compressed in steel cylinders for fear that the mechanism might not be easily understood. The gas is drawn from the cylinder just as we draw water from a water faucet—there is a valve which, upon being turned, allows the gas to escape. A child can easily manage it, therefore there is no reason why this most valuable agent should be neglected because of ignorance in regard to its manipulation.

In severe cases of acute anemia, oxygen may be administered constantly until relief is obtained, and then repeated as often as the exigencies of the case require; three times a day as the case improves. Close the nostrils, place the tube in the mouth after complete expiration and then inhale to the fullest capacity of the lungs; hold as long as is comfortable and exhale slowly through the nasal passages. Wait two minutes and repeat the process. Do this three times a day in ordinary anemic cases, whether acute or chronic, and have the patient stand, if possible, during inhalation of the gas.

The spinal ice bag (twenty-two inches in length, four and a

quarter in breadth,) may be used in all cases of chronic anemia with benefit, except in those cases where there is very evident and troublesome hyperemia of the head. It can be applied, first wrapped in one thickness of flannel, over the spine from the fourth cervical vertebra downward, being placed so that the bag lies equally upon each side of the vertebral spines. It may be used for one half an hour three times a day, morning, noon and evening, one hour after meals. If the hyperemia of the head is a very prominent symptom, then only fill the upper two compartments of the bag and apply over the spine from the fourth dorsal vertebra downward. This method of application will dilate the arterioles in the lower two-thirds of the body, and thus assist in relieving the hyperemia of the head.

One illustrative case treated and cured by the use of the spinal ice bag some years ago, when in practice in Boston, Mass., will serve to show the results which may be secured by an intelligent use of heat and cold over the spine in anemia; and I speak of heat as well as cold because the hot water bag will often be of service in relieving local congestions, such as hyperemic headache and that tendency to uterine hemorrhage which we often find in married women suffering from general anemia.

Mrs. F., thirty years old, had been confined to the house, and most of the time to her bed, for nineteen months previous to her treatment by the spinal ice bag, and had tried a host of remedies without success. She suffered with constant headache, was exceedingly nervous, had almost no appetite, could not digest and assimilate well what nourishment she did take, slept little and body, arms and legs were exceedingly cold all the time, evidencing a powerful contraction of the capillaries, and therefore feeble nutrition of the muscular system in general. Her bowels were constipated and she was much troubled with mental depression, as well as with great physical prostration. She was so weak that she could not walk across her bedroom. The spinal ice bag was used, a full length bag, for forty minutes each night and morning, and she at once began to improve in every way. Her sleep became natural, the body grew warmer each day, the appetite improved, the headaches were less frequent and severe, the bowels acted more naturally, and she so rapidly gained in physical strength that in less than three weeks she could walk a mile without great fatigue.

She was treated for six months, and recovered a large proportion of her original strength, and we believe that if we could have used oxygen inhalations during the same period she would have

recovered it all. During one of her periods, and during treatment, she was attacked by serious flooding from the uterus. The hot water bag, filled with water at 115 Fahr., was immediately placed over the dorsolumbar sympathetic ganglia, with a resulting speedy relief. From the evidence set forth we see that oxygen, iron and the spinal ice bag will, each of them, relieve and cure the anemic condition. But is it not also evident that their combination will insure more speedy and much greater success?

202 West 106th Street.

ADMINISTRATION AND VALUE OF ANTITOXIN.

By G. F. COTT, M. D.

Instructor in laryngology University Dispensary; attending laryngologist German Hospital Dispensary; member Erie County Medical Society; New York State Medical Association, etc.; consulting laryngologist Riverside Hospital; physician to City Dispensary; city physician, etc.

AT THE time antitoxin was introduced I was one of the many who accepted its efficacy with much reserve, strictly adhering to the motto, "Be not the first to bid the new drug stay, nor yet the last to cast the old away." I had even gone so far as to translate the article in the *Berliner Klinische Wochenschrift*, by Dr. Hansemann, assistant to Prof. Koch, and read it before a medical club as well as a number of the students at the college dispensary, for the purpose of showing them that there were two sides to the question. My experience at that time was rather limited; since then, however, ample time and opportunity have been afforded for further study of its effects.

There are at present, in the face of overwhelming proof, many physicians who regard the value of antitoxin with suspicion, in some cases due to those rare accidents occasionally recorded, while in others its use was abandoned because all patients did not recover after its administration. The time of its exhibition had also been lost sight of. Records of thousands of cases of diphtheria show that all recover if injected during the first twenty-four hours; if injected the second day, a small percentage die; if the third day, a larger percentage. Of course, it is difficult to tell which is the first, second or third day of the disease. A certain rule which I always follow and which has proved correct in something like 100 cases, I have found to be nearly absolute, not one having died in which the prognosis of recovery was given. Later on this will be referred to again.

It does not at all follow that the remedy is valueless because some patients die after being injected. Scepticism will always obtain in medicine, as in religion, and yet it is well to hold fast to that which is good. This paper was prompted by some severe criticisms which recently appeared in a medical journal, for though every physician is entitled to his opinions, facts are facts and are hard to gainsay. A medical journal is for the purpose of spreading knowledge, not of fostering ignorance.

In pharyngeal diphtheria cases often recover without the aid of antitoxin, but occasionally one dies from extension into the larynx before the effect becomes markedly noticeable. Now, accepting the fact (not the theory) that antitoxin has a certain amount of immunising quality, which no rational being with sufficient experience will deny, it is always safe to give a mild dose in all cases of diphtheria, but especially in doubtful ones. By its non-use the physician loads an enormous burden upon his conscience. It is true that too much is expected of antitoxin; its effects are not uniform, except as to final recovery, and then it must have been properly and timely administered. For instance, consider the present condition of the patient, the past history, the record of the family and the like. If the remedy respond well, these considerations may be omitted, but when improvement is slow or at a standstill, it is our duty to become acquainted with the cause. Assuming, of course, that you can place the fullest confidence in the preparation you are injecting, you will appreciate at once how much to use and how often to apply your remedy. All cases do not recover by the use of this agent, but that is no reason why it should be discarded. Chloroform and ether had their bitter enemies and now and then patients die apparently from their effects, still they are being used regardless of the occasional disasters. So also with antitoxin; it has been used long enough for us to weigh the pros and cons, and we find that in France, Germany, England and the United States the death-rate from diphtheria has been reduced from 45 per cent. to 15 per cent.; that even of those cases requiring surgical interference only 27 per cent. died. Of my own cases of intubation and tracheotomy 80 per cent. recovered.

Assuming now that we have reached that stage of evolution where all well-meaning physicians know that antitoxin is the best remedy to be used in diphtheria, whether nasal, pharyngeal or laryngeal (at one time known as membranous croup), let us consider

the proper mode of administration. It readily deteriorates when exposed to air, therefore it should be kept tightly corked until ready for use. Wash the skin well (preferably the thigh of a child and arm of an adult), then apply some antiseptic solution with cotton or gauze; boil both needle and syringe, if that can be done. Draw the entire contents of the vial into the syringe, inject, then place a pledget of sterilised cotton over the puncture as the needle is withdrawn, then bandage.

The most important point to be considered is the amount of antitoxin to be administered at one dose and how often. The dose is never gauged by the number of days of the patient's illness, but always by the physical condition presented. If laryngeal symptoms be at all manifest, a large dose must immediately be exhibited; if the pharynx only be involved, a dose of moderate size is sufficient. If the nasal cavities are affected, a large dose is required, since there is a large absorbing surface to combat. In the laryngeal type, stenosis and extension of the membrane into the smaller tubes (thus cutting off the supply of oxygen) are generally prevented by a large dose. Antitoxin is but one remedy to be relied upon during the course of the disease and the various symptoms must be treated as they arise. When destructive cell change has taken place antitoxin is practically useless and other remedies may do as well, or better. It is given to prevent this destructive change, but not to stop it. In the laryngeal cases always give the largest and most concentrated dose; even in very young children, two years or over, to get a rapid effect use the most concentrated article on the market; repeat it in eight to twelve hours, giving a third or fourth dose if necessary.

All antitoxin preparations in the market are supposed to be of the same standard strength, differing in bulk only, the more bulky the less efficient, or in other words, the slower the effects. The neatest division, I believe, is Mulford's. That house puts out three kinds, differing somewhat in strength of units or normals and in bulk. They have No. 1 standard, 500, 1000, 2000; No. 2, potent, and No. 3, extra potent. The most concentrated is No. 3 (extra potent), containing 4 c.c. to 2000 units and should always be given in severe cases. For immunising purposes No. 1 standard is sufficient; its bulk is only 5 c.c. to 500 units. When a medium dose is required, as in mild cases, No. 2 potent is suitable and very efficient, containing but 4 c.c. to the 1000 units. The other varieties may be used as the physician deems fit. It is well to become

acquainted with certain kinds, since they are often given in an emergency when there is no time to look up the subject. I use Mulford's because it has given the best results. The small syringe made by the same firm has proved very efficient. It holds but 5 c. c. and has the additional advantage of allowing the air to be readily and thoroughly expelled. The extra potent may also be administered with an ordinary hypodermic syringe. Those cases of sudden death reported to have followed the injection of antitoxin are supposed to have been caused by injecting air with the liquid, and if such be the case, it is the more necessary to possess a syringe from which the air can be readily expelled.

Prognosis.—The pulse is a pretty good indicator as to the effect of the diphtheria poison on the nerve centers and will disclose the presence of fatty degeneration and cell destruction. If at the time of injecting the antitoxin the pulse be strong, even though rapid—160 to 180 with rapid respiration—if intubation had become necessary or tracheotomy been performed, the prognosis is invariably favorable, leaving out of consideration the number of days the patient has been ill, provided the treatment be properly conducted. On the other hand, if the pulse become compressible, indicating a weak heart from toxemia, no amount of antitoxin seems to have much effect. This prognosis does not apply to cases complicated with pneumonia, nephritis, and the like, but to diphtheria only.

After the antitoxin has been administered sustain the heart and fortify the tissues with our old standard remedies, such as corrosive sublimate, strychnine, and the like. Whether or not you wish to omit one or all of the auxiliary drugs, always bear in mind that antitoxin is the sheet-anchor, and if given early, intubation for diphtheritic stenosis will be a thing of the past and tracheotomy will have become obsolete.

Following will be found a record of a few cases, all laryngeal, showing treatment and final results. Diagnosis was confirmed by bacteriological examination.

Record of Cases.

No.	Age.	Day of Disease When Antitoxin was Given.	Units.	Manufacturer.	Location of Membrane.	Intubation Performed. What Day of Disease.	Tube Removed.	Tracheotomy.	Condition of Heart.	Result.	REMARKS.
1	3	4	800 1500 1500	Buffalo. " Behring.	L.	4th day.	8th.	No.	Weak.	Died 8th day.	Apparently doing well for three days, then collapsed.
2	1	8	1500	Behring.	L.	No.	.....	"	Weak.	Died same day.	
3	6	1½	1500	Buffalo.	L.	2d day.	5th.	"	Good.	Recovered	
4	2	3	1500 500	Behring. P., D.	L. & P.	3d day.	6th.	"	"	"	
5	4	2½	1500	Behring.	L. & P.	3d day.	5th.	"	"	"	Case was treated without antitoxin by another physician, who said child would die.
6	5	3	4500	P., D.	L. & P.	3d day.	11th.	"	"	"	Tube removed four times within eight days, edema following each removal from two to twelve hours.
7	5	About 4	3000	Mulford.	L. & P.	No.	No.	"	"	"	Had follicular tonsillitis and gradually improved; suddenly became hoarse, K-L bacilli found about sixth day.
8	9	3	4000	Mulford.	L.	3d day.	6th.	"	"	"	
9	2½	3	800 1500	Buffalo. Behring.	L. & P.	3d and 4th days.	4th.	4th.	"	"	Tube was removed twenty minutes after introduction because of obstruction; breathed easy for eight hours, when tube was again introduced; coughed up five hours later when rapid tracheotomy was done.
10	2½	About 3	3200	Behring. Mulford.	L. & P.	Off and on for 2 weeks.	Two wks.	Yes. 15 days.	"	"	Strumous child; tracheotomy tube removed and intubated again, but later tracheotomy was hurriedly done; tube still in trachea after one and one-half years.

RECORD OF CASES.—(Continued.)

No.	Age.	Day of Disease When Antitoxin was Given.	Units.	Manufacturer.	Location of Membrane.	Intubation Performed. What Day of Disease.	Tube Removed.	Tracheotomy.	Condition of Heart.	Result.	REMARKS.
11	5	6	6000 2000	Behring. Mulford.	P. & L.	6th day.	48 hrs.	No.	Good.	Recovered	Developed nephritis on the eighth day and death was momentarily expected; 2,000 Mulford's extra potent was then given in the afternoon with whisky and child then began gradually to improve.
12	4	3	1000	Behring.	T. & L.	No.	.....	"	"	"	Marked stenosis, but intubation was deferred.
13	7	8	1000	Mulford.	L.	8th day.	36 hrs.	"	"	"	Second dose given twenty-four hours after first one.
14	2½	3	1000 1000 1000	Mulford. Mulford. Mulford.	L.	3d day.	93 hrs. later.	"	"	"	Second dose given in twenty-four hours Tube was removed once, but had to be replaced immediately.
15	10	3	1500 2000	Behring. Mulford.	Both T. & L.	3d day.	four days.	"	"	"	Second dose repeated in twenty-four hours.

First eleven cases were operated upon by myself; 12, 13, 14 and 15 by Dr. Wm. Meisburger.

ABBREVIATIONS:—P. D.—Parke, Davis. L.—Larynx. P.—Pharynx. T.—Tonsils.

Clinical Report.

A CASE OF CORROSIVE POISONING.[1]

IN WHICH THE MUCOUS MEMBRANE OF ESOPHAGUS AND A PORTION OF THE STOMACH WAS VOMITED AS A COMPLETE CAST.

By J. C. BROWN, M. D., Smethport, Pa.

ON THE 27th day of April, 1897, I was called into the country about four miles and found on my arrival, about 5 P. M., a Mr. B., 32 years old, near six feet in height, strong and robust, with an anxious expression and unable to speak above a loud whisper, though he had little or no pain. His temperature was 100°; pulse, 110. Upon examining his mouth I found the mucous membrane falling in shreds from every part of the buccal cavity and pharynx, excepting about an inch of the anterior part of the tongue and about the same area of the anterior part of the roof of the mouth.

He told me that on the day before, about 10 A. M., while walking along the road he found a bottle containing what he supposed to be whisky and drank it; that he immediately experienced a burning sensation in the mouth and throat and was taken intensely sick at his stomach; that he went into a barn, where he remained until the next morning, and that he vomited and retched nearly all of the remainder of that day and all night; was unable to swallow anything after he had taken the contents of the bottle; that he came to a hotel in Smethport in the morning about 6 A. M. and went to bed, where he remained until about noon, got up and walked home, a distance of nearly two miles over a steep hill, and that he stopped on the way at springs and tried to drink, but could not swallow a drop.

Judging from the condition of the mouth I presumed that if the material which caused it had also been taken into the stomach, there must be a great deal of destruction of mucous membrane there. I suspected, however, he might be mistaken as to swallowing it, for the symptoms did not indicate that the condition extended into the stomach, therefore I felt in doubt as to prognosis.

I left a mouthwash containing tannic acid, glycerine and listerine, also an antiseptic solution to use with an atomiser. I ordered milk and white of egg, alternated with Armour's extract of beef by enema, once in four or five hours and directed that he be rubbed

1. Read at the Buffalo Academy of Medicine.

with alcohol three or four times a day. The next day I received word that he was some better and had been able to swallow a little water. On the 29th I was called and found that at the suggestion of his mother he had swallowed two teaspoonfuls of kerosene oil, which produced a great deal of nausea and vomiting, otherwise he was about the same as when last seen by me.

He continued much in this condition—the eroded portions of the mouth turning somewhat dark from the lotion, temperature ranging between 99° and 102°, pulse between 80 and 120, spitting up a great deal of purulent material, sometimes mixed with blood—until the 7th of May, when from 2 A. M. until 5.30 A. M. he had very profuse hemorrhages, vomiting nearly a pint of blood every half hour according to the nurses. I saw him at the latter hour and gave him a hypodermic of ¼ grain morphine sulphate and 1-30 grain of strychnine nitrate, which seemed to control the hemorrhage fairly well. He received another similar hypodermic about 11 A. M. Not much hemorrhage during the day. About 5 P. M. of the same day I called, but before I got into the house the patient's brother came to me, somewhat excited, saying that his brother had just vomited something very peculiar and invited me to inspect it. He brought to me what at first sight appeared to be a blood-clot, but after washing it I found it to be the mucous membrane and submucous tissue of the esophagus and stomach. It was afterward examined by Dr. H. U. Williams, pathologist at the University of Buffalo, who found it to contain also a part of the muscular coat of the esophagus. The esophageal portion was in perfect shape with the exception of a few small holes which might have been made in the effort to expel it. The stomach portion was torn somewhat in strips, due perhaps to a more pronounced effect of the corrosive agent. The whole was about sixteen inches long. It can be seen in the museum of the University of Buffalo.

After the vomiting of this membrane the hemorrhage continued very profuse for thirty-six hours and then stopped; no hemorrhage afterward. He could swallow after this, but he was not allowed to do so for three days, and began by swallowing a few teaspoonfuls of chicken soup, then milk, and milk and brandy in small quantities, gradually increasing until May 15th, when he was taking about a quart of milk in twenty-four hours, besides some toast and one or two raw eggs. During this time the enemata of milk and extract of beef were continued, which, with the exception of once or twice, were well retained.

On the 18th of May he was taken to the Buffalo General Hospital, where he was seen by Dr. Allen A. Jones, to whom I am indebted for the invitation to appear before the Academy of Medicine to show the specimen, *i. e.*, the cast, and give a brief history of the case.

[NOTE.—In discussing the case some of the members seemed to doubt its authenticity. They could hardly believe that a person could expel the structures exhibited and still be alive nearly two weeks afterward. Of course, none could see but one result and that was death in a short time.]

He was brought home next day and withstood the journey well. He continued in about the same condition until May 30th. I soon became convinced that the food which he was taking by the stomach was not being digested, and I found afterward that it was simply passed on into the intestines, where it was stored for a time and then passed per rectum in about the same condition in which he took it. His brother informed me that at one time four or five quarts passed per rectum in an undigested condition. He was allowed food by the stomach because he craved it and retained it without distress, and as death would inevitably be the result, I thought he might as well be indulged.

On the 30th of May I tried to introduce a tube into the stomach. I could pass it to within three or four inches of the stomach, but no farther. I tried again on the following day with the same result, showing that contraction had already taken place at that point. I found afterward that the whole length of the esophagus was contracted.

After my visit on the 31st of May I did not see him again until the 10th of June, but heard from him frequently. I learned from his brother that on the 1st of June he began vomiting shreds of a brownish material, looking like portions of the cast, with a very foul odor. This continued for two or three days, followed by a yellowish material still more foul-smelling than the other and which lasted for a few days. I can form no opinion as to what this material was, as I have only the nurse's description of it. At this time taking of food by the stomach had been stopped. He continued in this condition, gradually getting weaker, vomiting and retching a great deal until he died, which was on the 24th of June. An autopsy was not permitted, I am sorry to say.

The length of time which had elapsed after he had swallowed the material and his inability, feigned or otherwise, to divulge what

he did with the bottle, thwarted our efforts to ascertain the nature of the corrosive.

Corrosive poisoning is not an uncommon occurrence, but it is interesting to note that life may be prolonged, as in the present instance, for an unusual period after the ingestion of a corrosive powerful enough to destroy the mucous lining of the entire esophagus and a part at least of the stomach; also that it is possible to take such a large amount of material into the stomach without distress afterward is remarkable.

I omitted to mention that while he could perform the act of swallowing from the time he vomited the cast up to within two weeks of his death, fluids nearly always produced coughing, owing probably to the partial destruction of the epiglottis, which allowed some of the fluid to trickle into the larynx. I should have made more strenuous efforts to keep the esophagus open if I had not been satisfied that the stomach was also destroyed, at least as far as its digestive function was concerned.

Finally, it may be stated that this patient suffered a great deal with hiccough, which I found could be stopped nearly always by depressing the tongue, as in an examination of the pharynx, and holding it down twenty or thirty seconds, after which it would be sometimes an hour and sometimes several hours before another paroxysm.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Special Meeting held July 28, 1897.

REPORTED BY F. C. GRAM, M. D., Secretary.

THE Medical Society of the County of Erie held a special meeting July 28, 1897, at 8.15 P. M., in the rooms of the Buffalo Academy of Medicine, for the purpose of taking appropriate action on the death of Dr. Edward Storck, who died July 26, 1897, aged 66 years.

An unusually large number of the profession had assembled when the president, Dr. LUCIEN HOWE, called the meeting to order and stated its object. As the secretary had not yet arrived Dr. De Lancey Rochester was selected as secretary pro tempore.

In announcing the death of Dr. Storck the president paid a fitting tribute to his memory, both as a citizen and a physician, especially commending his efforts in elevating the professional standard, as evinced by his work as chairman of the Board of Censors, a position which he filled for many years with credit to himself and the society.

On motion of Dr. JOSEPH HABERSTRO it was decided that the president appoint a committee on resolutions. The following were named: Drs. H. R. Hopkins, Haberstro, W. W. Potter, Hauenstein and Wyckoff.

The committee presented the following memorial:

Forasmuch as it hath pleased Almighty God in His wise providence to take out of this world the soul of our deceased brother, Dr. Edward Storck, we, therefore, unfeignedly and triumphantly declare that for nearly a half century our lamented brother wrought and strove with us in the loyal, honorable and eminent practice of the profession of medicine which he adorned.

That to this society, which he always loved and which gladly honored him with its highest office, he gave for many years, in unstinted measure, of his best thought and most arduous labors, gladly forsaking ease, income and popularity, well knowing that his efforts must bring to himself opposition, misrepresentation and vicious enmity. He wrought manfully for that which made the profession of medicine more clean and of good repute.

That in the wider relation of his chosen profession to the state he carried the same high ideals, the same uncompromising opposition to all that could retard progress or hold back efficiency.

The present medical law of the State of New York, the highest exponent of medical progress, received his hearty sympathy and most efficient support. Therefore,

Resolved, That the Medical Society of the County of Erie learns of the decease of Dr. Edward Storck with profound and sincere regret;

Resolved, That we tender to his bereaved family our deepest sympathy;

Resolved, That we recall his eminent and honorable career with gratitude and inspiration;

Resolved, That a copy of this minute be spread upon our records, be offered to the daily press, be suitably engrossed and transmitted to the family of the deceased.

H. R. HOPKINS, JOSEPH HABERSTRO,
JOHN HAUENSTEIN, WILLIAM WARREN POTTER.
C. C. WYCKOFF,

Dated July 28, 1897.

In moving the adoption of the memorial Dr. HOPKINS alluded to some of the personal characteristics of the deceased, which showed him in his true manhood, and also referred to his pleasant associations with the departed.

Dr. W. W. POTTER, in seconding the memorial, spoke of the work performed by Dr. Storck for his country during the trying period of the civil war, both as a member of the Union Defense Committee and at Fort Porter, and of his many accomplishments beyond the confines of his profession.

Dr. COAKLEY alluded to Dr. Storck's oratorical abilities, as demonstrated on many appropriate occasions years ago.

Other eulogistic remarks were made by Drs. E. H. Long, Abbott, Thomas Lothrop, Wyckoff, Hauenstein and Conrad Diehl.

A telegram of regret was received by the President from Dr. F. F. Hoyer, of Tonawanda, as follows:

TONAWANDA, N. Y., July 28, 1897.

LUCIEN HOWE, M. D.,
183 Delaware Avenue.

I am sad at the death of my old friend, Dr. Storck, and regret I cannot be present at the meeting this evening.

FREDERICK F. HOYER.

The resolutions were adopted by a unanimous vote.

It was resolved that the society attend the funeral in a body, meeting at Dr. Dambach's office, at 2.30 P. M., Thursday, June 29, 1897.

The meeting then adjourned.

Progress in Medical Science.

MEDICINE, PATHOLOGY AND THERAPEUTICS.

A CONTRIBUTION TO THE THERAPEUTICS OF IRON.

GELLHORN, of Berlin, (*Therapeutische Monatshefte,*) says investigations of Quincke have demonstrated incontestably that the favorable results which have been obtained from the administration of iron are actually attributable to its absorption, and not to accidental circumstances, to diet alone, or even suggestion.

At the last Congress for Internal Medicine, the subject of the therapeutics of iron was so thoroughly ventilated by the foremost clinicians, as well as by numerous physicians in late years, that a new contribution would appear superfluous. This subject, however, is of such immense importance to the general practitioner, that accumulation of material is necessary in order to eliminate the least doubt as to the efficacy of a therapeutic measure which, originating at first on the basis of speculation, and later supported by the results of empirical observations, has finally been demonstrated to be of value by exact experimentation.

In the management of chlorosis and anemia, and the host of sequelæ of these diseases, the physician would be powerless if he had not in iron a specific, or at least a potent and indispensable adjunct to his other therapeutic resources. The patients, who belong for the most part to the working classes, give in the main the same group of symptoms; amenorrhea, scanty or profuse, weakening, irregular, usually premature, menses; headache, anorexia and dyspepsia; neuralgias, and almost invariably marked lassitude, which interferes markedly with their ability to work. In these cases prompt and radical help must be afforded, in order to restore to the patients their full working capacity as soon as possible. It is well known that the therapeutic value of the various iron preparations differs greatly. This is shown *a priori* by the abundance of manufactured products of this kind. My experience relates chiefly to three preparations—pilulæ chinini cum ferro, formula magistralis of Berlin, liquor ferri albuminati, and the neutral Pepto-Mangan (Gude). My results with the first of these three remedies have been very indifferent, while with the liquor ferri albuminati of the pharmacopeia they were somewhat better. I have instituted accurate examinations, however, with only Gude's Pepto-Mangan and the data given further on relate to this remedy alone. Owing to my limited experience with the many other preparations employed by various authors, I would not designate the Pepto-Mangan as a universal remedy, or as the only efficient preparation.

In the case of one of my patients I proceeded as follows: I prescribed Pepto-Mangan (Gude), one teaspoonful three times daily after meals, and regulated the diet in accordance with the directions furnished with the preparation. Sour and fatty foods as well as raw fruits, are to be avoided under all circumstances. Fritsch (Diseases of Women, 1892, pp. 469,) advises, indeed, that the

desire for acids manifested by chlorotics should be gratified. According to my experience, however, this craving for acids is to be regarded as a pathological condition of the alimentary tract, which is made worse by further supply of acids, but can be successfully overcome by an unstimulating diet. In cases where the social conditions in any way permitted, I allowed the patient to take a small glass of red wine three times daily, but never during a period of one hour before and after the administration of the medicament, in order to prevent the combination of the tannic acid contained in the wine with the iron. The use of potatoes was restricted as much as possible, at least, during the first four weeks. Furthermore, I resorted to the dietetic regulations customary in these cases, but changed them to advantage when, as so often happens, obstinate constipation was present, following in this respect the suggestions of Hebra, which have recently been again advocated by Ruge, (Transactions of the Obstetrical and Gynecological Society of Berlin, 13, III., 1896,) and obtained generally excellent results. In contrast to several authors who made it a practice to remove any existing dyspepsia before resorting to the use of iron, I have followed the method of v. Ziemssen and Baumler, of at once administering iron—unless the presence of a severe gastric affection, especially ulcer of the stomach, could be positively determined—and observed as early as the end of one or two weeks an increase of appetite and subsidence of the gastric disorder.

I would lay especial stress upon systematic exercise in the open air. I ordered the patients who, with but two exceptions, were treated out of bed, to take a stroll at midday, at first of five to ten minutes' duration. At the end of three to four days they were allowed to remain outdoors for five to ten minutes longer.

After each walk they were advised to take off their corsets, put on their slippers and rest for an hour on the sofa. Under this treatment the lassitude invariably vanished after a time.

In the manner thus described I have treated in all about sixty patients. In twenty-four cases I instituted quantitative estimations of hemoglobin at regular intervals of three, five or eight days. Under normal conditions the quantity of hemoglobin in women amounts to 12.59 per cent. when estimated in comparison with the other constituents of the blood. Among my cases the lowest amount met with was in a single instance, 30 per cent. of the normal, that is to say, of the above 12.59 per cent.

I also derived exceedingly favorable results from the use of Pepto-Mangan (Gude) in patients who came to us for operations after being exhausted by protracted hemorrhages. Of course, convalescence in such cases is delayed; the system recuperates but slowly from the double injury inflicted by the losses of blood and the operative intervention. Digestive disturbances are especially apt to be troublesome. In these cases ferruginous medication often produces remarkable improvement.

I cannot close this paper without calling attention to the beneficial influence exerted by Pepto-Mangan (Gude) in anemic neuralgias.

I think I am justified in asserting that in my therapeutic trials with Pepto-Mangan I obtained all that can be rationally demanded. And I further consider myself warranted in stating that in view of the unquestionable necessity of ferruginous medication in certain troublesome constitutional affections this preparation acts as a most efficient and useful auxiliary to our therapeutic efforts.

THE SPECIFIC ACTION OF QUININE IN MALARIA.

Dr. E. C. Register (Editor of the *Charlotte Med. Jour.*) read a paper with this title (*St. Louis Med. Era*) before the North Carolina Medical Society. After many years of study, both clinical and microscopical, he arrives at the following conclusion in reference to the specific action of quinine in the continued forms of malarial fever: He says a malarial fever without complications will subside after the plasmodia of malaria disappears from the blood; that we have in quinine the means to completely eradicate malarial poison from the body; that malarial fever occurring in a previously healthy subject and in the central United States, if at once recognised and properly treated, never ends in death; that it is speedily curable, never continues, provided the nature of the disease be recognised and appropriate treatment employed.

Register has made microscopical examinations of the blood of several hundred patients suffering with remittent malarial fever, and has studied closely and thoroughly the cresentic and ring-shaped bodies, which he says are the forms of the parasite which is responsible for the continued types of this fever, and he finds that the reason quinine does not always affect these irregular forms of the poison is on account of the usual defects in its administration. He contends that the drug is very imperfectly absorbed when given by the stomach, and when the patient has a tempera-

ture of over 102°. He says that in cases of continued malarial fever, if distinct and well-marked intermission of the fever are produced artificially by the use of antipyrine, antifebrine and phenacetine, the cresentic and ring-shaped bodies will disappear after the administration of quinine, as quickly as the spherical bodies that are found in an ordinary case of intermittent fever. In reference to the belief that the forms of the parasite that inhabit the blood-cells are not acted on by quinine, he says : "There is no doubt in my mind that this belief is not erroneous. Besides my own observations I have been able to collect the opinions of thirty-two authors touching upon this point, and twenty-eight out of the thirty-two believe that the endoglobular or intracorpuscular forms are not, on this account, the cause of an uncontrollable fever, and that its proximity to the blood-cell does not, in any way, protect it from the action of quinine."

BRONCHO-PNEUMONIA.

In the broncho-pneumonia of children (*Therapeutic Gazette; Louisville Medical Monthly*) when mucus accumulates in the bronchial tubes, and if the child is exceedingly feeble and it is not considered well to administer an emetic, Gaston Lyon orders the following mixture :

℞	Syrup	1 ounce.
	Syrup of tolu	1 ounce.
	Cognac	2½ drachms.
	Acetate of ammonium	20 grains.
	Benzoate of sodium	20 grains. M.

One or two teaspoonfuls of this may be given every hour or every two hours, according to the age of the patient. If the cough is excessive it may be well to add to this mixture from three to four drops of the tincture of belladonna or the tincture of aconite, but, as a general rule, narcotics and antispasmodics are not desirable in very young children.

During convalescence any bronchitis which persists should be treated by the various balsams or by one or two teaspoonfuls a day of a mixture of equal parts of syrup of tolu and syrup of turpentine. In the way of tonics to general nutrition cod-liver oil and hypophosphite of lime are of advantage, and should there be any involvement of the tracheo-bronchial glands or emphysema, iodide of potassium is particularly indicated. Iron is also of value,

should anemia be present, prescribed in the dose of three teaspoonfuls a day of the following mixture :

R Syrup ..... 1 ounce.
Syrup of terpine ..... 2 ounces.
Syrup of iodide of iron ..... 2 ounces.
Peppermint-water ..... 2 ounces.

BRONCHIAL CATARRH.

SÄNGER prescribed, (*Centralblatt für Innere Medicin,*) some six years ago, hydrastis canadensis for a patient suffering with tuberculosis of the larynx and apex catarrh, the immediate occasion of its employment being a trifling hemoptysis. Four days later I found that for three days there had been no blood in the expectoration, and, furthermore, that a tormenting cough with which he had suffered had completely disappeared ; also, the expectoration had become decidedly less and the character of the sputum changed.

FOLLICULAR PHARYNGITIS.

TO BE USED (*Clinical Chronicle*) as an application by means of cotton applicator for chronic follicular pharyngitis, post nasal catarrh and atrophic rhinitis :

R Iodin. pur ..... gr. iij.
Potass. iodid ..... gr. v.
Acid trichloracetic ..... gr. vij.
Glycerine,
Aq. dest ..... aa ℥ss.

M. This can be used in varying strengths according to the nature of the case.

INCONTINENCE OF URINE.

R Syr. belladonnæ
Syr. tolutani ..... aa 60.0
Mix. Sig.—Take a coffee-spoonful morning and night.

Or : R Ferri carbon ..... 0.03 to 0.10
Extr. belladonnæ
Extr. nucis vom. ..... aa 0.01 to 0.05
Mix.—Ft. pulv. tales No. I. (1).

Sig.—Begin with one powder daily, and gradually increase the dose until the physiological effect of the belladonnæ is obtained.

—*Centralb. f. d. Gesam. Therapie*, 1897, XV., 59.

MEDICAL EDUCATION AND STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Member New York State Medical Examining and Licensing Board.

RIGHT OF APPEAL FROM MEDICAL BOARD.

DOES the Montana statute allow an appeal to an applicant (*Jour. Am. Med. Assn.*) who has been refused a certificate by the medical board authorising him to practise medicine and surgery in the state on the ground that the applicant's examination papers show that he has not the requisite learning to entitle him to such certificate? This question was raised in the case of State v. District Court, and was passed upon by the Supreme Court of Montana. Its decision is of increased importance because a number of other states have similar statutes and this appears to be the first authoritative adjudication of the question. The language especially involved is as follows: "In all cases of the refusal or revocation of a certificate to practise medicine by the said board, the person aggrieved thereby may appeal from the decision of the board to the district court of the county in which such revocation or refusal was made." It was argued by the attorney-general that this provision only gave the right of appeal where the certificate was refused or revoked by the board for unprofessional, dishonorable or immoral conduct, and that there was no appeal from the refusal of the board to issue a certificate on the ground of incompetency of the applicant. But, in examining the statute, the Supreme Court said it found no language that restricted the right of appeal to any particular class of cases. The terms of the statute are general, giving the right of appeal "in all cases of the refusal or revocation of a certificate to practise medicine by the said board." So it holds that it gives the right of appeal in the class of cases referred to in the question. Nay more, it holds that the trial in the district court, awkward, difficult and unsatisfactory as same might be, would have to be *de novo*. Whether or not such laws are wise or unwise, politic or impolitic, it says is for the legislature to determine. Justice Hunt adds, in a concurring opinion, that judges often have to pass upon equally difficult questions, involving study and knowledge of abstruse sciences, and when these difficult problems arise they are permitted to call to their aid those who are most proficient and experienced in the branches of knowledge required to settle them. Nor does he think that courts will

be disposed to reverse medical boards if they can help doing it, where there is no wilful wrong or prejudice proved.

A NEW SYSTEM OF ENTRANCE EXAMINATION AT THE UNIVERSITY OF PENNSYLVANIA.

BEGINNING with the first term of the session of the University of Pennsylvania for 1899, a new system of entrance requirements is to go into effect in the college, the law school and the medical department. The inauguration of this new plan in these departments will mark an important epoch in the history of higher education, and will place the University of Pennsylvania in the front rank of the leading universities of the world.

The new system is quite a radical departure from the present entrance requirements, but by the time it is to go into effect these tests of a student's education will have been yearly increased until the proper requirements have been secured to justify the application of the new plan.

In order that the new system may go into effect in the college as soon as possible, arrangements have been made by which candidates from any school wishing to enter in 1898 may, on request of that school, be examined according to this new plan. The requirements under this plan are in accord with the scheme adopted by the confidence of colleges held for the purpose of establishing a uniform standard of admission.

Those subjects forming part of the entrance requirements to some or all courses at the university, such as English grammar and reading, solid geometry and plane trigonometry and physics, undergo no change. For the course in science and technology the requirements in Latin grammar, Cesar and Virgil will remain the same as heretofore.

Under the new system the requirements for the college and law school will be as follows : English grammar (as in Abbott's How to Parse, or Murray's Advanced Lessons in English Composition. Analysis and Grammar.)

English literature.—The candidate for 1897 must evince a general knowledge of the following works and their authors : Shakespeare's As You Like It, DeFoe's History of the Plague in London, Irving's Tales of a Traveler, Hawthorne's Twice Told Tales, Longfellow's Evangeline, George Eliot's Silas Marner and a special knowledge of the subject matter, form and construction of the

following works: Shakespeare's Merchant of Venice, Burke's Speech on Conciliation with America, Scott's Marmion, Macaulay's Life of Samuel Johnston.

History.—Of the United States (Fiske, Montgomery or Thomas); of Greece (Oman's History, with Mahaffy's Old Greek Life, or Myer's History); Roman (Allen's, pages 1-224 and Preston and Dodge's private life of the Romans). The history of England (Gardner is suggested) will be accepted as an equivalent of Greek and Roman history together.

Algebra.—To the end of Quadratic equations.

Plane geometry (as in the first five books of Chauvenet's or Wentworth's geometry).

In addition to the above, the applicant has his choice of being examined in any two of the following languages: Greek, Latin, French or German; or in any one of these languages and additional mathematics; or in any one of these languages and physics.

The most important changes from the present requirements in the college are in Greek, Roman, English and American history; algebra and plane geometry; Greek, Latin, French and German languages.

The members of the faculty of the law school are of the opinion that the best training for the study of law is a full college course of four years, as the student's future depends in a large measure on his standing in the professional school. A large number of those who study law are college graduates, and those who are not, it is claimed, cannot hope, except in rare instances, to compete successfully with the college men. A college course permits a wide latitude in the choice of subjects of study, but there is no one course of study absolutely necessary to those who desire to study law. The main thing to be obtained from a college course is culture and mental training, but they recommend to the student a thorough knowledge of history, of constitutional and administrative law, of politics and economics and of some one language other than English—preferably Latin—as being of great assistance in the study of law.

In order that the students may be influenced in taking a college course prior to entering the law school, all candidates for admission to the first-year class, possessing the degree of bachelor of arts or bachelor of science, or an equivalent degree from any recognised college or university, will be admitted without further examination. A diploma from an approved public high school will be

accepted during 1897, in lieu of an examination in those subjects covered by the diploma.

The post-graduate course in law, which extends through two years, and aims not only to broaden and deepen the legal knowledge acquired in the law school course, but also to enable students to pursue advanced work with a view to special investigation and research, is suspended during the current year, pending certain modifications in the system.

That the new system may not be a too radical departure for the medical school, the requirements in that department will be gradually increased each year, beginning with 1897. At that time candidates for admission who do not possess college degrees will be required to pass examinations in English grammar, United States history, geography, arithmetic and algebra, physics and Latin grammar or plane geometry. The requirements in these studies will be increased for 1898. By 1899 those entering the first-year class will be required to pass examinations in the subjects at present required for entrance to the freshman class in the college of the university.

In addition to the requirements for 1899 the faculty of the medical school recommends that young men, before entering upon the study of medicine in that department, should have previously taken the degree either of bachelor of arts or bachelor of science at some college or university where the standing is equivalent to that of the University of Pennsylvania. Should this be impracticable two years' time should be devoted to the study of chemistry or biology, with laboratory work in each, amounting to six hours a week, for eight months in each year, mammalian and human anatomy, histology and physiology, including the practical use of the microscope and culture methods in bacteriology. Free hand drawing is also an important preliminary study.

Any candidate who may have received a degree in arts or science from a college recognised by the university will be admitted without examination. Students who have satisfactorily pursued the two-year course in biology at the university will be exempt from the entrance examination ; and, until 1899, any candidate who has passed the entrance examination of a recognised college, or is a graduate of a recognised normal or high school or academy of equal rank, may enter without examination.

After this new plan has been thoroughly established in the medical and law schools, it is more than probable that the next step taken in the interest of higher education will be in requiring

from all students entering these two departments a degree from some college of the same standing in the educational world as the College of the University of Pennsylvania.

THE NEW IOWA MEDICAL PRACTICE LAW,

It is believed, (*Va. Med. Semi-Monthly*,) will compel quackery of every kind to look elsewhere than in Iowa for its victims. Christian science, osteopathy, the magnetic fraud, the traveling quack—all will be required to move out of the state, or show good cause for tarrying. The only compromise in the law is an amendment providing that those who have practised five consecutive years—three of which shall be in one locality in Iowa—may continue their practice. This lets in a few frauds, but the doors are tightly closed behind them. The backbone of the law provides that a diploma from a school recognised as in good standing, admits only to examination of the candidate. The law will practically enforce itself. It provides a penalty of not less than $300, and commitment until paid. Few will care to risk the consequences of violation. The district court only has jurisdiction. The medical student clause permits only those to practise under a preceptor who has had two courses of lectures in a recognised medical college.

IDAHO STATE BOARD OF MEDICAL EXAMINERS.

This new organisation is getting in shape for business (*Med. Sentinel*) and registering the physicians under the new law. Dr. C. L. Sweet, the secretary, has a large amount of work to do, and in fact the full board, in reörganising the state on a medical basis, is kept busy. The physicians of the state have been furnished with blanks and are given the privilege of having their diplomas registered where they already have certificates. The first examination session will be held on September 6th, at Boise City, in the state house, at 10 A. M., and everything will be running along smoothly and nicely in a short time. The *Sentinel* predicts that scarcely twelve months will have elapsed until Idaho will be known all over the country as having in operation one of the best medical laws in existence and that this law is in the hands of a board competent and eager to enforce the same.

THE WISCONSIN EXAMINING BOARD.

The State Board of Medical Examiners, (*Peoria Med. Jour.*, August, 1897,) under the new Wisconsin law, was organised a few

weeks ago by the election of Dr. Samuel Bell, of Beloit, as president and Dr. H. M. Ludwig, of Richland Centre, as secretary and treasurer. The former is a member of the regular profession and the latter an "eclectic."

It was decided that all examinations shall be conducted in the English language and that the examination fee be $10 and the license fee $5. Rules were also adopted for the government of examinations, the form of application for examination and registration now used by the Iowa State Board being selected, and the Minnesota form of certificate decided upon.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

TREATMENT OF CHRONIC NEPHRITIS.

FAVILL says the etiology of renal degeneration (*Chicago Medical Recorder*, February, 1897,) must be taken into consideration when prescribing treatment. Clinically considered, nephritis is a progressive, nutritive perversion causing necrosis, followed by more or less substitution of one histological form for another. The inflammatory process is present in a small proportion of the cases. Pathologists and clinicians are apparently at variance regarding the question of inflammatory process in chronic nephritis. There are three classes of causes—namely, vascular, septic and toxic.

The principles of therapeusis rest upon these various etiological factors. Organic change is undoubtedly preceded by functional defect, some disturbance of cell capacity.

Can a diagnosis be made previous to anatomical degeneration? It is possible to make a diagnosis as tissue destruction of the kidney begins and this is the period for therapeutic possibilities.

The treatment of the early stages of nephritis is distinctly different in character from that required for the later stages of this malady, hence the importance of distinguishing the incipient and advanced stages. The primary indication is to relieve the excretory labor of the kidney by prescribing the most digestible food, in order that waste products shall be as small in quantity as possible, and all measures, medicinal, hygienic and others, shall contribute to this end. The most important measure is dietetic. Promote bodily combustion, promote oxidation, a principle or rule of treatment that is simple, but complex in its practical details.

All observers agree that the essential offending element results from the defective oxidised nitrogenous food. The nitrogenous food is the most difficult to oxidise, and with impaired digestion and oxidising power there is a residuum of sub-oxidised products remaining to be eliminated by the enfeebled kidneys.

As the treatment of nephritis is largely dietary, the albuminous proteids should be prohibited, excepting the milk diet; at least the proteid food should be allowed sparingly, governed by the functional, metabolic capacity of the system.

The urea is the basis upon which to estimate the oxidising power, taking into consideration the food, its kind and quantity, as well as the size of the patient.

There are two valuable drugs which promote oxidisation—namely, iron and mercury. In anemic conditions, iron is especially indicated, as it adds to the oxidising machinery of the body. Mercury in the form of calomel is to be administered for months at a time, in from one-twentieth to one-half a grain dose three times daily. It is alterative and metabolic. These two remedies will cover the most of the therapeutical indications.

The treatment of the later stages of nephritis is the treatment of its complications.

GENERAL MANAGEMENT OF CHRONIC NEPHRITIS.

Frank Overton (*The Medical Compend*) states that with the subsidence of the cause of acute nephritis the kidney returns to its normal condition. Chronic nephritis tends to perpetuate itself.

When the kidneys are unable to do their work, some of the energy of the other organs of the body is directed to this purpose, thus impairing digestion, assimilation, elimination and malnutrition results. Inert waste products are not fully oxidised (urea), resulting in the excessive production of uric acid, creatinin, xanthine and other irritants. This calls for more work from the already overburdened kidneys and establishes a vicious circle. Without the primary fault of the kidneys, disturbance of digestion and assimilation may bring about a chronic nephritis. This is exemplified by the moderate and constant user of alcoholic liquors. The constant use of alcohol impairs the oxidation of the albumin of the blood. Suboxidation results in the formation of irritating products which develop nephritis or aggravate preëxisting nephritis.

PROGNOSIS OF CHRONIC NEPHRITIS.

WALLS (*Chicago Medical Reporter*, February, 1897,) reports that clinicians agree that where the anatomical, pathological lesion of chronic Bright's disease is established, anatomical cure is impossible; yet under certain favoring circumstances the existence of chronic nephritis is not incompatible with a long life of apparent good health. The kidneys are capable of doing many times the work normally exacted of them, and if the lesion comes on slowly a large portion of the kidney structure may be destroyed before the other eliminating organs are called upon to vicariously excrete the urinary products.

Bright's disease is classified under three heads: parenchymatous, interstitial and mixed. The prognosis is nearly always bad in the parenchymatous variety, which terminates fatally in from several months to three years. It is alleged that a relative or functional cure occurs occasionally, when secondary contraction is established, this condition being known as the mixed form.

Death occurs from uremia, dropsy or secondary inflammation of the vital organs in the parenchymatous variety, thus conforming with Osler's paradox that patients seldom die of the disease from which they suffer.

The anatomical lesion of chronic interstitial nephritis is incurable, yet its victim often lives many years in fair health. Dickenson reports cases that lived ten to twenty years.

Uremia, cardiac insufficiency, dropsy, incessant vomiting, diarrhea and respiratory toxemia are storm signals of grave import. Chronic Bright's disease, after scarlet fever and diphtheria, is very fatal, but recovery is possible. The evolution of chronic Bright's disease in the aged is slow, but is none the less grave. Bright's disease in pregnancy during the last month is more favorable if the dangers of acute uremia are circumvented, but a fatal exacerbation may occur after delivery. The condition of the heart, whether compensatory hypertrophy occurs, or muscular impairment is present, prolongs or hastens death. In interstitial nephritis the degree of cardiac hypertrophy indicates the amount of contraction of the kidney. Cardiac impairment indicates a grave prognosis. Cardiac atony is manifested by diminished arterial tension and increased venous tension. Arterial rigidity indicates sclerosis, which is frequently present in the cerebral vessels and predisposes to aneurism, rupture and apoplexy. Impairment of the functions of the skin and alimentary canal, together with acne, gangrene,

erysipelas and the like, complicate the prognosis. Albuminuric retinitis, according to Eichhorst, indicates death within two years. Dropsy, due to cutaneous vaso-motor irritation, is less grave in its prognosis than mixed anasarca, due to cardiac insufficiency and blood cachexia. General dropsy, pericardial and pleural effusions render the prognosis very grave. Uremia is a complex symptom, and if it comes on suddenly is a graver prognostic sign than if its onset be slow and gradual. Respiratory phenomena are critical in their significance. Coma, convulsions and delirium indicate an early fatal termination. Albumin, casts, amount of urinary solids, especially urea, are valuable prophetic criteria. They indicate the capacity of the kidneys. Numerous granular, fatty and epithelial casts indicate the degree of kidney destruction. The prognosis of chronic Bright's disease is modified by the concomitant disturbance of other organs of the body.

THE DIAGNOSIS OF CHRONIC NEPHRITIS.

EDWARDS states that (*Chicago Medical Recorder*, February, 1897,) systematic and repeated examinations of the urine are required in the diagnosis of chronic nephritis. The examination must be made from a twenty-four hour specimen, taking the specific gravity, the gross amount of solids, albumin and microscopic morphology, casts, pus, and the like. Exceptional clinical features sometimes obscure the diagnosis. In the terminal stage of interstitial nephritis, the amount of urine decreases and is constantly small in the absence of cardiac hypertrophy. Persistent low specific gravity and total amount of solids rather indicate functional inadequacy than renal disease. Albumin is found after repeated examination of daily quantity passed.

It is a mistake to regard albuminuria as a certain and constant symptom. Nephritis certainly exists without albuminuria. The diagnosis is made from microscopic and visceral conditions. The presence of uremia, retinal and cardio-vascular lesions are diagnostic symptoms. Indubitable nephritis sine albuminuria has been reported. Casts may be found at intervals when albumin is temporarily absent. Granular and epithelial casts point to some degenerative inflammatory lesion. It is questionable whether even hyaline casts are found in normal urine. Cardio-vascular changes are not invariably present in contracted kidneys. He who examines the heart and urine rarely fails to diagnosticate nephritis.

The heart lesion may be primary or secondary to renal disease. Digitalis and strychnia have a real diagnostic value in differentiation between renal stasis and cardiac activity. Gallop-rhythm characterises renal disease. It is difficult or impossible to differentiate between myocarditis with renal stasis, and renal disease with ultimate cardiac asystole. Differentiation of the various forms of renal disease, parenchymatous and interstitial nephritis, primary and secondary contraction, chronic hemorrhagic nephritis or acute exacerbation of chronic nephritis, contraction or arterio-sclerotic atrophy, is often possible, but impracticable, owing to disagreement of pathologists and clinicians regarding these divisions ; some pathologists only recognise chronic nephritis.

The status and therapeusis differ with the etiology, *e. g.*, nephritis is scarcely the same disease when caused by malaria, pregnancy, tuberculosis, endocarditis or plumbism. The manifold symptoms of other seemingly dominant diseases may obscure ; imperfect history, inefficient physical examination, neglect of known facts, and the like, may lead to a mistaken diagnosis.

Urine albumin may be a sub-oxidised form of serum albumin. Cases of kidney disease, secondary to indigestion and assimilation, are especially dangerous and rapid in their course because unrecognised and because patients are so loath to give up their vicious methods of eating and drinking.

The management of the diet is of primary importance. The first indication is to diminish the amount of nitrogenous products to be excreted. This is done by diminishing the amount of nitrogenous food, and promoting oxidation by means suggested elsewhere. The giving of amylaceous and fatty foods without albumin does not remedy the difficulty, since oxidation of these products will occur at the expense of the tissues of the body. A definite amount of albumin is oxidised each day, so that if it is not supplied by the food, it is taken from the system. It is impossible to control the nitrogenous excretory products by prohibiting the use of albuminous food. If the amount of sugar and fat be limited, and an abundant diet of easily digested albuminoids be eaten, the food will be easily oxidised, thus lessening the amount of irritating waste products to be eliminated. Milk is the typical food. Later something more substantial is required, then add sugar, fat, eggs, bread and butter and fresh meat.

Assist digestion. To aid the stomach give dilute hydrochloric acid. To aid intestinal digestion give chologogues, combined with

a mercurial, ox bile, strychnia, extract of colocynth compound and pancreatin. Give sufficient colocynth to insure two to three movements of the bowels each day.

A select diet fortified by digestive aids, with a good quantity of food, will be assimilated with the least expenditure of energy and with the least amount of irritating waste products. Aid excretion by mercury and colocynth acting upon the liver and intestines. Give diuretics, strychnia, digitalis and caffeine, and avoid the depressing and irritating urinary diuretics, such as potassium salts, buchu, turpentine, and the like.

In acute exacerbations give croton oil, elaterium and stimulate the skin with hot air bath and pilocarpin. For anasarca and dyspnea give compound jalap powder. Administer full doses of these remedies to insure prompt results.

Even after albumin and casts have disappeared, and the urine is normal in quantity, but low in specific gravity (urinary insufficiency), continue the dieting, so as to forestall recrudescence of the disease. In this way this malady will be held in check for years.

Dr. Elliott says that the mixed diet is the most rational. Meat should constitute one-fourth and vegetables three-fourths of the total amount. Over-indulgence gives to the circulation a large amount of nitrogenous waste, to be eliminated by the kidneys, overtaxed by a hyperacid (concentrated urine), since these subjects seldom drink an adequate amount of water. The by-products of indigestion from over-indulgence add to the irritation and eventually lead to organic impairment of the kidneys.

METHYLENE BLUE IN THE DIAGNOSIS OF RENAL PERMEABILITY.

M. Achard stated in a report published in the *Journal des Practiciens* that he had gathered fifty new observations and performed eighteen autopsies, which confirm results previously obtained by him. He verified the integrity of the kidneys by autopsies in twenty-two cases of normal elimination of methylene blue. Thirteen out of twenty-eight cases of tardy elimination showed renal lesions at the autopsy.

In a case of nephrydrosis it was shown by ureteral catheterisation, that methylene blue did not pass through the diseased kidney. Ordinarily there were no therapeutical effects due to the methylene blue on the albuminuria.

M. Hirtz states that he has employed this remedy in six cases of albuminuria and observed no appreciable benefit.

M. Chamtemesse gave twelve to fifteen grains a day without results.

Netchaieff reports a case of Bright's disease in a man aged fifty years, which presented the cardiac and renal difficulties as well as the albuminuria and casts characterising this malady. He alleges that methylene blue given three times daily in one and one-half grain doses relieved all the symptoms. Albumin and casts disappeared.—*Therapeutic Gazette.*

Selections.

THE NERVE ELEMENT IN SURGICAL PATHOLOGY.

By J. McFADDEN GASTON, M. D., Atlanta, Ga.

THE interlacing of the nerves with the different structures of the body gives energy to every vital organ in health and aggravates their disorder in disease.

Neuralgia in all its protean forms is not a mere functional derangement of the nerve centers, but depends in most cases upon local modifications resulting from inflammatory action in the neurilemma or parenchymatous structure of the affected nerve. It may also exist in a spurious form connected with compression upon the trunk or from cicatricial adhesions after operations. The impression that contraction of the nerves gives rise to painful development has led to nerve stretching, but little advantage has attended this procedure, thus showing that nerve shortening is not pathognomonic.

Rheumatic complications involving various regions of the body are dependent upon the nerve supply to the part and the acute sensibilities of such structures renders anodynes of the greatest importance in the treatment of such disorders. Inflammatory processes are accompanied by pain from the entrance of sensory branches of the nerves into the organs and the means adopted for the relief of inflammation must include the control of the neurotic disturbances by combating pain. It is fair to infer that all agencies for the mitigation of pain have a curative effect upon the structures involved in disease.

The reciprocal influence of body and mind in the progress of most physical disorders depends upon their connection through the nervous system.

Our deficient knowledge of the etiological factor involved in shock inclines the speaker to the view that a continuous baleful influence is propagated to the nerve centers from the disintegration of the structure involved and that this may be modified by amputation with a clean incision through sound tissues above the point of injury, soon after such violence to the parts. The injury inflicted upon the superficial cutaneous nerve fibrils is extended to the internal organs by the correlation of nerves and capillaries with the viscera. The notable effects observed from cups, sinapisms and blisters upon the skin are due to the sympathies established through this channel of the nerves. The eruption of teeth in children is attended by neurotic disturbances of a marked character. The various manifestations of the intimate relations of the nerves with the different structures of the body open the way for comprehending the rôle of the nerve element in surgical pathology.

The development of traumatic neuritis is the most common complication of surgical cases, and there is rarely any extensive lesion which is not accompanied by more or less pain, dependent upon inflammation of the nerve or its neurilemma. The irritation of the peripheral branch of a nerve may set up a train of disorders terminating in tetanus or lymphangitis, and the serious consequences of these affections are notorious. In the latter condition ganglions as well as lymphatics become involved in the inflammatory process and suppuration is set up in the course of the lymphatics, with the characteristic features of pyemia.

The subcutaneous use of simple distilled water has been resorted to with apparent effect upon the nervous system, and this proves a delicate response of the nerves to the action of agents introduced hypodermatically. The transmission of cutaneous modifications to the internal organs becomes, in numerous instances, simply the expression or delivery of a dynamic influence which operates through the nerves. Instead of local irritation there is a general influence upon the organism corresponding to the special property of the agent employed, and we must attribute the effect to the conduction of medicinal powers from the point of introduction through the various channels of communication with the dependent structures.

The chief features in the relations of the nervous system to other structures involved in surgery lead to the following deductions:

1. The cutaneous development of the minute branches of the cerebro-spinal system of nerves, and the ganglionic ramifications of the great sympathetic, are so related to the capillaries as to establish a reciprocal action and reaction between them and the great nerve centers.

2. The vaso-motor nerves are so intimately linked with the excito-motor and excito-dynamic system of nerves that impressions made through the superficial afferent nerves are conveyed to all the corporeal structures and tissues, so as to produce their effects upon different organs.

3. Reflex phenomena depend upon a complex interchange of local pathological conditions with the nervous ramifications to remote parts of the body.

4. The fountain-head of energy for all the functions lies in the nerve centers and by controlling emanations from this source, the vital forces will be propagated with regularity and uniformity to all the remote parts of the physical organisation. On the contrary, a hurtful influence disseminated from the nerve centers entails disease upon the different organs.

5. The means to be adopted for averting injurious impressions upon the nerve centers, and the measures to be used for the correction of their derangement, make up the whole prophylactic agency of hygiene and include all the therapeutic appliances in the treatment of diseases, as well as the application of surgical measures.

6. Close observation of the various modifications of the nerve element on the physical organism should reveal its direct influence in surgical pathology and lead the surgeon to the adoption of proper means of relief.—*Southern Medical Record.*

SYMPTOMS OF CHLOROFORM COLLAPSE.

Guthrie reviews this interesting subject. The symptoms in all cases are alike, and are as follows: Sudden and complete blanching of the face takes place, leaving it of a ghastly-gray. The term "pallor" conveys no idea of the actual appearance. The eyelids fall open, the eyeballs are fixed in the upward position with pupils fully dilated as under extreme atropinism. At the same time the cornea becomes glazed and sticky, giving an appearance which, once seen, is never forgotten. It can only be described in a somewhat fanciful manner by saying that the light seems to fade from the eye as does the color from the cheek and lips. Probably it is due

to flaccidity of the cornea from decrease of intra-ocular tension, noticed by Dubois (*Soc. de Biologie*, 1884). It is the undoubted look of death. I have seen it at many a deathbed, but never under any other circumstances except those at present considered.

The appearance of a person in a dead faint, or just after a severe accident, is no more than the shade of that which obtains in cases of chloroform collapse.

The pulse and cardiac impulse are at these times no longer to be felt. Respiration commonly ceases at the moment when the blanching and stoppage of the pulse occur, but at times a few feeble and irregular inspiratory gasps are subsequently drawn. The patient is to all appearances dead. Whether the heart actually ceases to beat at such times will probably never be ascertained, for the moments are too valuable to be spent in delicate investigations on this point. Neither is it possible to affirm from clinical observation that the heart becomes dilated, as in the experiments of MacWilliam and Johnson on animals. Time cannot be wasted in mapping out the area of the heart's dulness in a patient who is in imminent danger of death.

In some cases lividity, accompanied by turgescence of the veins of neck and face, immediately precedes the blanching and look of death, and is coincident with the stoppage of respiration. Possibly dilatation of the heart has actually taken place and the condition is that of the true cardiac syncope, described by Snow.

It might be objected that, were dilatation present, the cyanosis should continue and not give place to pallor; but possibly as the heart fails regurgitation takes place into the inferior cava, and allows the blood from the distended veins of neck and head to enter the right heart.

In children, cyanosis, except where actual mechanical asphyxia has been produced, is less apparent than pallor. Under treatment, children almost invariably recover from these alarming conditions, whereas in adults the reverse is unfortunately the case.

As a rule the preliminary signs of collapse are sufficiently well marked, and if observed in time many a catastrophe may be averted.

These signs are circulatory and respiratory.

The circulatory sign is the presence of increasing pallor, not amounting to absolute blanching.

Failure of respiration is marked by a peculiar type of breathing, in which expiration is extremely short and inefficient, while inspiration is sudden, forcible and gasping, often accompanied by falling

of the lower jaw, and spasmodic clonic contraction of the chin-depressors and muscles of the neck. The inspiratory gasps are irregular and broken, and occur with increasing slowness until the condition of sudden collapse ensues.

This type of breathing is precisely similar to that which is often seen in a patient dying of respiratory failure from other causes.—*Clinical Journal.*

LITHOLAPAXY IN THE MALE UNDER LOCAL ANESTHESIA.

By JAMES PEDERSEN, M. D.,
Instructor in venereal and genito-urinary diseases, New York Post-Graduate Medical School and Hospital.

Local anesthesia by cocaine or eucaine for the performing of this operation may justly be considered a step in advance of the more usual employment of general anesthesia by ether or chloroform. As it secures for the patient a saving of time and a minimum of risk, we should endeavor to apply this improved technique whenever possible.

Not every case is suited to litholapaxy under merely local anesthesia. A small or even medium-sized calculus, be it hard or soft, in a not over-irritable adult bladder, without prostatic hypertrophy, is the ideal condition. In proportion as this is departed from in one or more of its factors, the operation grows in difficulty, until finally we are met by positive contra-indications. These may be: (1) A large calculus; (2) a bladder so irritable that it will not retain a volume of fluid sufficient to make possible and safe the necessary excursions of the lithotrite during the manipulations; (3) partially obstructive prostatic hypertrophy, making the introduction of the lithotrite—still more so of the evacuator—difficult and painful by reason of the unavoidable pressure brought to bear upon the gland-mass; (4) a post-prostatic pouch in which a calculus or fragments cannot easily be reached with the tip of the lithotrite; (5) a badly sacculated bladder; (6) a patient so exhausted by protracted suffering that he cannot endure even that degree of discomfort and pain which cannot be avoided. Finally, litholapaxy without general anesthesia should not be undertaken in children and very young subjects.

From the foregoing it is manifest that a knowledge, on the part of the surgeon, of the patient, his prostate, bladder and its contents,

gained by careful personal examination, is a necessary prerequisite to a decision in favor of local anesthesia, and also that the surgeon should have the necessary experience and dexterity, and a "fine adjustment" of the tactile sense. In point of skill required, litholapaxy under local anesthesia is to litholapaxy under general anesthesia what the latter is to suprapubic lithotomy.

The method of procedure is as follows: the patient should lie flat on his back with his hips slightly elevated. The thigh and legs may be extended on the same level or be slightly flexed, or the legs may hang down over the edge of the table. After gentle irrigation of the bladder with a warm boracic acid solution, inject into the bladder through the catheter ℥ ij. of a four per cent. solution of cocaine or eucaine. The latter is now preferred, because of its lesser toxic effects. Withdraw the catheter. With a Bangs' syringe-sound, of a size which will enter the meatus without stretching it, instill ♏ xx. to xxx. of the same anesthetising solution into the prostatic and membranous portions of the urethra, and leave the instrument with its beak resting at the bulbo-membranous junction to help retain the solution thus instilled. At the end of six or seven minutes anesthesia will have been obtained. Remove the syringe-sound, re-introduce the catheter, evacuate the solution in the bladder, inject ℥ v. to vi. of warm boracic acid solution, and withdraw the catheter. Thus far the lubricant used must be some material soluble in water, for example, sterilised glycerine. From now on a lubricant with more "body," such as sterilised vaseline, may be used, and the crushing of the calculus and evacuation of the fragments and débris is proceeded with in the ordinary way.

If cocaine, instead of eucaine, be employed, the condition of the bladder-wall should be taken into account, and the patient's general condition watched. A diseased bladder mucous-membrane (as in chronic cystitis) more readily absorbs than does one covered with healthy epithelium.

As litholapaxy under local anesthesia is usually done to remove a small calculus, a soft, secondary calculus, or a fragment accidentally or unavoidably left behind after some previous operation, Chismore's evacuating lithotrite is of special advantage, because of the rapidity and certainty possible with it and because of the consequent economy in manipulations. The value of the latter at once becomes apparent when we recollect that the unavoidable distress felt by the patient is a deep-seated pain, due to pressure upon the

prostrate body when the lithotrite is being moved this way and that in the initial search for the calculus or fragment.

If, at the moment of introducing the lithotrite, the meatus proves too small to admit it, a few minims of the four per cent. solution can be injected and the meatus cut. If desired, the whole penile urethra may be anesthetised also.

In many cases, notably those presenting a fragment or a small secondary calculus, the operation of litholapaxy under local anesthesia can be done in the surgeon's office and the patient allowed to go about his duties after resting a few minutes. This is an advantage which he greatly values. In other cases, however, there is a greater advantage to be gained by having the patient remain in bed a few hours preceding and following the operation.

29 East 44th Street. —*Post-Graduate*, August.

A New Dressing.—In *Cincinnati Lancet-Clinic*, Dr. Charles A. L. Reed, of Cincinnati, at the recent meeting of the Cincinnati Obstetrical Society, described before that body a new dressing with which he had been made familiar during a visit to Mexico. This new dressing is asbestos, prepared in various lengths and widths, and it can be put to the various uses for which ordinary surgical dressings are employed. For instance, in the matter of sponges, asbestos being perfectly pliable, eminently absorptive, smooth and soft, it is well adapted to the purposes of a sponge without possessing any of the harshness or roughness of sponges made from other material. Dr. Reed states that it can be made into wicks for the purpose of uterine drainage, although he questions its usefulness here owing to its delicate texture, such frailty rendering it prone to breakage during attempt at withdrawal. But the best recommendation consists in the certainty of its sterilisation. Placing the asbestos upon a sterile plate, adding a small quantity of alcohol and lighting, complete sterilisation is assured.—*Northwestern Medical and Surgical Reporter.*

To Differentiate between a tumor of the right kidney and a tumor of the liver, inflate the rectum and colon. If the tumor is of the kidney the inflated intestines will lie in front of it, and there will be a tympanitic resonance; if the tumor is of the liver, it is rendered more prominent and dulness occurs on percussion.—*Pract. Med.*

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AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

IT HAS been thought by many experienced in such matters to be impracticable to hold a successful meeting of a special medical society in the summer season at a pleasure resort. This association, however, has demonstrated the possibility of doing so. It held its tenth annual session at the Cataract House, Niagara Falls, August 17–20, 1897, and it turned out to be one of the most successful and interesting meetings it ever held. Not only was there a large attendance of the Fellows, but the medical profession, both from immediate and remote points, attended in generous force to listen to a large group of interesting papers, followed in most instances by equally interesting discussions.

One of the principal elements of successful work is suitable weather, and at Niagara, during the period mentioned, the temperature was cool, the air inspiriting to mental effort, and the whole environment bordered on the ideal. The papers, as usual in this association, dealt forcefully with a wide range of subjects in obstetrics, gynecology, abdominal and pelvic surgery. Many of the discussions were exhaustive in character, spirited in manner and instructive in teaching. It would be difficult to distinguish or differentiate those that best answer this description when all were more or less filled with animation and research. When the work done at this meeting is published those who read it will be able to judge best for themselves of its character and usefulness.

Turning now to the social part of the meeting it is proper to remark that the Niagara Falls Academy of Medicine contributed largely to the enjoyment of the occasion, and especially to the

entertainment of the visiting ladies. As soon as it was announced last year that the tenth annual meeting would be held at Niagara Falls, the Academy of Medicine, individually and collectively, tendered its services, to be used in any manner available to promote the interests of the association and render its visit a pleasant one. It held numerous meetings and appointed various committees to further these ends.

Dr. W. R. Campbell, president of the Academy, delivered the address of welcome on the morning of the first day, while a committee was in constant attendance on the meetings to furnish information to the visitors and to assist them in any manner in which their services could be made available. A tally-ho coach left the Cataract House every morning at ten o'clock, loaded with visiting ladies and escorted by members of the Academy of Medicine. This afforded a pleasant opportunity to see the Falls from various view points, and was much appreciated by the ladies. On Wednesday afternoon, the second day of the meeting, the Niagara Electric Power company, by a special invitation, afforded the visitors an opportunity of inspecting its wonderful plant. At the instance of the Academy of Medicine the Gorge and the Canadian electric railways made a special round-trip rate, giving all a view of the river on both sides, above and below the Falls. There is no excursion to be taken within the limits of time and distance that affords a finer view of nature in heroic grandeur than this one, all of which apparently was appreciated to the utmost by the Association and its guests.

The annual dinner was given at the Cataract House, Thursday evening at 8 o'clock. The president, Dr. James F. W. Ross, presided and introduced the several speakers in appropriate terms. The following addresses were made: "The American Association of Obstetricians and Gynecologists," Dr. James F. W. Ross, Toronto; "The State of New York and the Niagara Falls Reservation," Hon. Thomas V. Welch, Niagara Falls; "The Niagara Falls Academy of Medicine," Dr. Charles G. Stivers, Niagara Falls; "The Niagara Frontier in History," Peter A. Porter, Esq., Niagara Falls; "The State and the Medical Profession," Hon. Rowland B. Mahany, Buffalo; "The American Medical Association," Dr. Joseph M. Mathews, Louisville. The eloquence of the speakers was frequently interrupted with outbursts of applause, and it is pertinent to add that seldom has post prandial oratory interested an audience from beginning to end in a greater degree.

Instrumental music was furnished by the Cataract House orchestra and the speaking was interspersed with vocal selections by Mr. John Broughton, bass soloist, and the Niagara Falls quartette. The musical features of the occasion were especially fine and were particularly enjoyed by the diners.

The election of officers for the ensuing year resulted as follows: president, Dr. Charles A. L. Reed, of Cincinnati; vice-presidents, Dr. Richard Douglas, of Nashville, and Dr. Walter B. Dorsett, of St. Louis; secretary, Dr. William Warren Potter, of Buffalo; treasurer, Dr. Xavier Oswald Werder, of Pittsburg; executive council, Drs. Lewis Samuel McMurtry, of Louisville, Albert Vander Veer, Albany, J. Henry Carstens, Detroit, William E. B. Davis, Birmingham, and John Milton Duff, Pittsburg.

The next meeting will be held at Pittsburg, September 20, 21 and 22, 1898. The association adjourned at 1 o'clock P. M. on Friday, after one of the most interesting meetings in its history. The management of the Cataract House most courteously contributed its full share toward this result.

KENTUCKY'S TRIUMPH.

WHILE many states are absorbed with questions relating to preliminary studies and other preparations for the practice of medicine, it has remained for Kentucky to master one quite as important—namely, that relating to persons unlawfully pretending to be doctors, who are robbing people of their money as well as destroying their health and, in some instances, their lives.

The state board of health of Kentucky, presided over by Dr. Joseph M. Mathews, of Louisville, has pursued a relentless war against all forms of irregular medicine until there is nowhere within the borders of that great commonwealth a single individual engaged in the illegal practice of the healing art. All advertising quacks, itinerant peddlers of nostrums, pretending doctors and every person offering to cure disease in any irregular or unauthorised manner, have been driven from the state. Several cases have been tried in the courts bearing on the various forms of quackery, in all of which the board has been sustained in its prosecutions, until now there is absolutely no doubt about its power in all these cases and its authority is no longer questioned even by the guilty, unless it be to effect delay.

The latest triumph of the board is in the case of a "professor of osteopathy," who practised his legerdemain in Louisville

This form of trickery is seeking recognition quite generally in the midwest and has a few outlying disciples scattered easterly even as far as Buffalo. This kind of deception is little else than mere massage, but differs from the latter in that it pretends to cure joint and other deformities, whereas massage is an aid to scientific medicine, to be used in the discretion of a physician like any other therapeutic measure. In the case recently tried in Louisville it was charged that the osteopath twisted, pulled and flexed the leg and thigh of a little sufferer from hip disease, so that he set up a febrile reaction that necessitated medical treatment. Judge Thompson, before whom the case was tried, gave his opinion that this mountebank had subjected a child laboring under tuberculous disease of the hip-joint to cruel and unnecessary torture, that affected its health and necessitated the employment of a real physician to avert calamitous results. The learned judge further defined the practice of medicine as follows: "Any person who, for compensation, professes to apply any science which relates to the prevention, cure or alleviation of the diseases of the human body, is practising medicine within the meaning of the statute." This concise yet comprehensive definition, which will doubtless serve as a precedent, will include the christian science pretenders—a sect so slippery that it has heretofore evaded every attempted application of the law.

New York, with its splendid system of medical education, guarding the entrance doors with a comprehensive preliminary education, its four years of medical collegiate training and its final state examination for license, has much to be proud of; but heretofore it has proved itself to be totally incompetent to exclude advertising, itinerant, "consultation free" or other similar quacks from its borders. It may, therefore, bowing humbly before the proud commonwealth of Kentucky, lay its tribute at the feet of a great profession that has done as much as that of any other state or country to elevate the standard of legitimate medicine and make it respected of all men.

THE G. A. R. HOSPITAL SERVICE.

WHILE Buffalo scored many triumphs in the entertainment of its distinguished guests, the Grand Army of the Republic and their friends, last month, not the least notable one was the manner in which it cared for the sick comrades. Dr. Ernest

Wende, health commissioner, was early selected to take charge of this service by the citizens' committee, and to say that he performed the duties of his office in a most admirable manner, and to the satisfaction of all, is only to reaffirm what everybody knows.

It is, however, our purpose at this time to mention some of the details of the excellent system adopted and carried out. In the first place a field hospital was established at the corner of Michigan and Wells streets, which, by reason of its location near the principal railway stations, received for the most part emergency cases. It was capable of accommodating 100 patients and was in charge of Dr. Chauncey P. Smith. During the week fifty-three patients were treated at this hospital, the last one being discharged cured on Saturday, August 28th, after which the hospital was closed.

At Camp Jewett, where the hospital was under the immediate charge of Dr. A. H. Briggs, director of hospitals, the principal service was rendered. As an indication of the labor performed we may mention that about 100 patients received treatment during the day of the parade, August 25th. Most of these were cases of sudden illness due to exhaustion or intestinal disturbances. Nevertheless, every available physician and nurse was kept busy from early morning until late evening. At the Terrace hospital, where homeopathic physicians assumed charge, great activity was displayed and excellent management was apparent.

The work done on the day of the parade is always the greatest test of the medical organisation at these meetings. It is to the lasting credit of the Buffalo staff of physicians that they proved equal to the great demand on their energy and skill. Twelve hospital stations were established along the line of march, where were received and treated more than 100 persons who gave out during the parade. Beside this over 5,000 gallons of ice water were dispensed to the marching host.

The ambulance service, under command of Dr. G. W. York, was most admirably managed and rendered prompt as well as careful aid whenever called upon. The part taken by the nurses must not be overlooked, for it was an important one and well performed. It was stated, on whose authority we know not, that Canadian nurses refused to tender their services to the medical department.

As a final remark, we desire to state that only words of praise are due to every physician, nurse and attendant who contributed skill, time and money to the G. A. R. hospital service during the 31st annual encampment at Buffalo, August 23-28, 1897.

Personal.

Dr. John F. Raub, medical referee of the U. S. Pension Bureau at Washington, attended the Grand Army of the Republic ceremonies at Buffalo last month, and expressed himself as greatly pleased with the treatment the veterans received at the hands of the residents of the bison city. Dr. Raub is one of the war medalists, having received a bronze medal granted by act of Congress for special valor on the field of battle. He busied himself during a portion of his visit with the investigation of contested or appealed pension cases. After completing his vacation at his old home, Bethlehem, Pa., he will resume his duties at Washington in about a fortnight.

Dr. Joseph M. Mathews, president of the Kentucky state board of health and first vice-president of the American Medical Association, attended the meeting of the American Association of Obstetricians and Gynecologists at Niagara Falls, August 17–20, 1897. Dr. Mathews made a speech at the annual dinner of the Association, adding fresh laurels to his already well-rounded reputation as a master of ornate and graceful rhetoric. He also took part in the discussions and contributed to the success of the meeting.

Dr. Edward Clark, of 2268 Main street, Buffalo, but whose office is in Ellicott Square, was appointed one of the new milk inspectors, to take effect August 1, 1897. Dr. John H. Grant, of 196 Triangle street, was also appointed milk inspector, to take effect on the same date. These appointments were made from the civil-service list.

Dr. Charles E. Sajous, editor of the *Annual of the Universal Medical Sciences*, who has lived for several years in Paris, has returned to Philadelphia, where he will fill the chair of laryngology and act as dean of the faculty of the Medico-Chirurgical College.

Dr. Bransford Lewis, of St. Louis, announces the removal of his office to Suite 627 Century Building, Ninth and Olive streets. Hours: 10 a. m. to 1 p. m.; 2 to 3 p. m. Sundays, 9 to 10 a. m.

Dr. W. E. Dignen, of Buffalo, who has spent the last few months in Europe in study and travel, has returned and resumed the practice of his profession at 381 Fourteenth street.

Dr. Marcel Hartwig, of 34 East Huron street, Buffalo, is now traveling on the continent of Europe, but will return and resume his professional work in the early autumn.

Obituary.

Dr. Edward Storck, of Buffalo, died at his residence 220 East Eagle street, July 26, 1897, aged 66 years. He was born at Baden, South Germany, April 19, 1831, received his education in German and French schools, and afterward studied medicine with his father. In 1848 the revolution in South Germany interfered with the further prosecution of his studies, after which the family emigrated to America, settling in Williamsville, Erie county, New York. Edward Storck graduated from the University of Michigan in 1854, and in the same year married Lucy Grove. He then located in Buffalo, where he continued to reside until his death.

Dr. Storck soon acquired an extensive practice, principally among the German-American residents of Buffalo, and arose to prominence. When the civil war broke out Dr. Storck became a member of the Union defense committee, an organisation that contributed to the raising of troops for the field by supplying all the necessary means and methods necessary before the state or general government assumed control of the regiments. It was headed by Mayor Franklin A. Alberger, chairman, and made up of prominent citizens, among whom were Dr. Edward Storck, James Adams, Isaac Holloway, Alderman A. A. Howard and others. Dr. Storck easily became one of the most active and prominent men on the committee, and his enthusiasm, coupled with a vigorous young manhood, was such that he was enabled to perform an enormous amount of work. He espoused the Union cause loyally and worked faithfully to the end that the spirit of rebellion might be annihilated.

In 1872 Dr. Storck was elected president of the common council, which made him ex-officio president of the board of health, and under his energetic influence measures were adopted that soon controlled an epidemic of small-pox, then threatening to scourge the city. The first plans for an intercepting sewer, which involved means for the abatement of the Hamburg canal, were submitted by him to the common council in 1871, at which time he represented the fourth ward as alderman. He became a member of the Medical

Society of the County of Erie in 1854, and was elected to the presidency in 1878. He was chosen chairman of the board of censors in 1880, serving in that capacity for twelve consecutive years.

EDWARD STORCK, M. D.

During this period he was instrumental in securing legislation for the regulation of the study and practice of medicine, taking a prominent part in all the legislation of that stormy period. While he was chairman of the board of censors he fearlessly made war on

quackery in all forms, and by his bold and energetic action drove unlawful practitioners from the City of Buffalo and the County of Erie. He was the inveterate foe of all shams and pretensions and the name of Storck became a dread to illegal doctors. Of all the work performed by Dr. Storck during the forty-two years of his membership in the Society none will stand out in more conspicuous prominence than that connected with his chairmanship of the board of censors. For this heroic service he will be forever entitled to the gratitude of community and his memory will be enshrined in the hearts of a grateful people.

Dr. Storck was not, however, simply a physician. There was another side to his character and career. He was a man of affairs, taking a deep interest in all that concerned the welfare of Buffalo and its people. He did not hesitate to take active part in any public affair that offered to contribute to the prosperity of his adopted city, or to promote the welfare of its inhabitants. He was, moreover, a man of esthetic tastes, interesting himself in music and art, contributing time and money to the advancement of both. In evidence of this it may be mentioned that he was president of the Buffalo Liedertafel for many years, and he also served several terms as president of the German Young Men's Association, which latter office he held at the time of his death.

He is survived by his widow and two children, one of the latter being Dr. Eugene E. Storck, at present practising his profession in Buffalo, and the other, the wife of Frank T. Williams, is also a resident of this city.

Dr. Storck was a man of strong character, amiable disposition, forceful in method and manner when necessary, gentle betimes, and always honest, frank and just. He acquired prominence as a physician, conspicuousness as a citizen and leaves a sweet memory to a large circle of devoted friends.

His funeral was attended by the Medical Society of the County of Erie and a large group of business men, friends and acquaintances. His remains were interred at Forest Lawn.

Dr. Edwin M. Kitchel, assistant professor of histology and pathology in the College of Physicians and Surgeons, New York, died August 26, 1897, at Roosevelt Hospital from injuries received at the summer home of his father at Hulett's Landing, Lake George. Dr. Kitchel was playing a game of blindman's buff Tuesday evening, August 24th, on the piazza on the second floor of the house and

while blindfolded fell over the railing, a distance of ten feet, sustaining an injury to his spine that resulted fatally. Dr. Frank M. Hupp, of Wheeling, West Virginia, was near by and gave what assistance was possible. It was decided to bring the injured man to New York and he was taken by boat to Caldwell and thence by train to New York. But nothing could be done to help him and he died an hour after his arrival at Roosevelt Hospital. Dr. Kitchel was the only son of James T. and Irene A. Kitchel, of Newark. He was graduated from Columbia University and the College of Physicians and Surgeons, and for four years had been the assistant of Dr. T. Mitchell Prudden, professor of histology and pathology in the latter institution. Dr. Kitchel was 26 years old. The funeral was held, August 28th, at the home of his father, at Riverside and Grafton avenues, Woodside, Newark.—*Tribune.*

Dr. Myron H. Mills, of Mount Morris, one of the oldest and most prominent residents of that village, died at his residence on Saturday, August 14, 1897, of apoplexy. He was a son of William Mills, who built the first house on the Mount Morris tract.

Dr. Mills was well known throughout Western New York. He was president of the Livingston-county Historical Society, of the Livingston-county Pioneer Society and of the Mills Water-works Company of that place. He was the author of much Indian history under the familiar nom de plume of "Cornplanter." He was graduated from the Geneva Medical College in 1844, enlisted as a private in the Mexican war and was promoted to be an assistant surgeon U. S. Army. He is survived by a widow, two daughters and two sisters.

Society Meetings.

Officers of the Buffalo Academy of Medicine.—Session of 1897–1898.—President, Dr. Lucien Howe: secretary, Dr. Thomas F. Dwyer; treasurer, Dr. E. A. Smith; trustees, Dr. M. Hartwig (three years), Dr. DeLancey Rochester (two years), Dr. Henry R. Hopkins (one year).

The vice-presidents by virtue of being chairmen of the various sections are: Dr. DeLancey Rochester, chairman section on medicine; Dr. Chauncey P. Smith, chairman section on surgery; Dr.

Charles E. Congdon, chairman section on obstetrics; Dr. Frank J. Thornbury, chairman section on pathology.

The council is therefore composed of the aforementioned officers, the president of the Academy of the previous year, Dr. Herman Mynter, and the secretaries of the sections who are: Dr. Wm. G. Ring, secretary section on medicine; Dr. A. E. Diehl, secretary section on surgery; Dr. C. J. Reynolds, secretary section on obstetrics; Dr. J. C. Clemesha, secretary section on pathology.

PROGRAM 1897–98.

September 7th.—Surgery.—Subject to be announced.

September 14th.—Medicine.—Quarterly meeting of Academy. —Medico-legal aspects of cases of poisoning; with especial reference to restriction of sale of poisons, A. L. Benedict, M. D.; Hon. Arthur W. Hickman.

September 21st.—Pathology.—Some observations of the physiology of the stomach; report of X-ray exhibition, A. L. Benedict, M. D. Abnormal cell development in plants and animals; a study in comparative pathology, Miss Mary Forster, Nawnham College, England.

September 28th.—Obstetrics.—Shall we leave the uterus in situ in excision of the adnexa? C. C. Frederick, M. D. Report of three cases of hydrocephalus, L. Schröter, M. D.

October 5th.—Surgery.—Subject to be announced.

October 12th.—Medicine.—Clinical examination of blood, Helena Kuhlman, M. D. Sputum, Nelson G. Russell, M. D.

October 19th.—Pathology.—Recent researches in the pathology of trichophytosis, William Thomas Corlett, M. D., L. R. C. P., Lond., professor of dermatology and syphilology Western Reserve University, Cleveland, O.

October 26th.—Obstetrics.—Subject to be announced. Charles A. L. Reed, M. D., Cincinnati, O. Gonorrhea in women, J. Henry Dowd, M. D.

November 2d.—Surgery.—Subject to be announced.

November 9th.—Medicine.—Renal calculus, John H. Musser, M. D., professor clinical medicine, University of Pennsylvania. Discussion opened by Charles G. Stockton, M. D., and Herman Mynter, M. D.

November 16th.—Pathology.—Skin-grafting, history, physiology and indications with account of a new and original method, Zera J. Lusk, M. D., Warsaw, N. Y.

November 23d.—Obstetrics.—Diagnosis and treatment of carcinoma of the cervix, M. A. Crockett, M. D.

December 7th.—Surgery.—Quarterly meeting of Academy.—Subject to be announced.

December 14th.—Medicine.—The Jew in medicine; a historical sketch, Julius Ullman, M. D.

December 21st.—Pathology.—The possible transmission of disease by wearing "second-hand" clothing, with record of experiments, William G. Bissell, M. D. Gangrenous appendicitis complicated by portal phlebitis and multiple hepatic abscess, Earl P. Lothrop, M. D.

December 28th.—Obstetrics.—Appendicitis in its relation to obstetrics, Eugene Smith, M. D.

January 4th.—Surgery.—Subject to be announced. Roswell Park, M. D.

January 11th.—Medicine.—Pulmonary disturbance in children; infantile asthma, Irving M. Snow, M. D. Empyema, Eugene A. Smith, M. D.

January 18th.—Pathology.—Toxic degeneration of the nervous system, Ira Van Gieson, M. D., director Pathological Institute, New York State commission in lunacy, New York.

January 25th.—Obstetrics.—Subject to be announced. James F. W. Ross, M. D., Toronto, Ont.

February 1st.—Surgery.—Subject to be announced. W. C. Phelps, M. D.

February 8th.—Medicine.—Pulmonary Tuberculosis: 1. Early diagnosis, F. J. Thornbury, M. D.; 2. Prognosis and treatment, S. S. Green, M. D.

February 15th.—Pathology.—Multiple cerebro-spinal sclerosis, illustrated, Floyd S. Crego, M. D.

February 22d.—Obstetrics.—Etiology, pathology, diagnosis and treatment of myofibroma of uterus, H. D. Ingraham, M. D.

March 1st.—Surgery.—Subject to be announced. Dr. H. Mickle.

March 8th.—Medicine.—Diet in Bright's disease, F. C. Shattuck, M. D., professor clinical medicine, Harvard. Discussion opened by Allen A. Jones, M. D.

March 15th.—Pathology.—Quarterly meeting of Academy.—The anatomy and mechanism of the foot, considered with reference to certain abnormal conditions, L. A. Weigel, M. D., Rochester, N. Y.

March 22d.—Obstetrics.—Subject to be announced. L. S. McMurtry, M. D., Louisville, Ky. Asepsis and antisepsis as applied to obstetrics, William Warren Potter, M. D.

April 5th.—Surgery.—Subject to be announced.

April 12th.—Medicine.—Pericarditis; its diagnosis and its consequence, J. H. Pryor, M. D. Myocardial changes; early diagnosis and prevention of further development, H. C. Buswell, M. D.

April 19th.—Pathology.—The pathology of the cerebellum, William C. Krauss, M. D. Some pathological findings in the blood; exhibition of slides, Albert E. Woehnert, M. D.

April 26th.— Obstetrics.— Etiology, pathology, diagnosis and treatment of acute salpingitis, William G. Taylor, M. D. The bacteriology of the female genital tract in health and disease. Frank J. Thornbury, M. D.

May 3d.—Surgery.—Subject to be announced. Eugene Smith, M. D., W. H. Heath, M. D.

May 10th.—Medicine.—Municipal hygiene, H. R. Hopkins, M. D., W. G. Bissell, M. D.

May 17th.—Pathology.—An experimental study of the effect of occlusion of the ureters upon the kidneys, William L. Baum, M. D., professor of skin and venereal diseases, Post-graduate Medical School, Chicago, Ill.

May 24th.—Obstetrics.—Conservative treatment of the ovary, Herman E. Hayd, M. D. Subject to be announced. B. C. Johnson, M. D.

June 7th.—Surgery.—Subject to be announced.

June 14th.—Annual meeting of Academy.

June 21st.—Pathology.—Subject to be announced.

June 28th.—Obstetrics.—Quarterly meeting of Academy.—Subject to be announced. Joseph Price, M. D., Philadelphia, Pa.

The Mississippi Valley Medical Association will hold its next annual meeting at Louisville, October 5, 6, 7 and 8, 1897. The executive committee met recently, at Louisville, in conjunction with the local committee of arrangement, the following being present: Drs. Stucky, Grant, Mathews, Love, Holloway and Reynolds. It is expected to make the coming meeting the largest and best in the history of the Association, and everything points to a fulfillment of this endeavor. The railroads will make a round-trip rate of one and a third fare. The address on surgery will be

delivered by Dr. J. B. Murphy, Chicago; the address on medicine by Dr. John V. Shoemaker, Philadelphia. The following papers have been offered: I. A. Abt, Chicago, The nature of croup following measles; J. C. Ayers, Cincinnati, Further observations in the use of hydrogen dioxide in the treatment of blepharitis marginalis; W. F. Barclay, Pittsburg, Milk: its production and uses; J. F. Barnhill, Indianapolis, Regarding hypertrophied faucial tonsils; J. M. Batten, Pittsburg, Report of five cases of heart disease; J. K. Bauduy, St. Louis, Some new thoughts in the treatment of locomotor ataxia; A. C. Bernays, St. Louis, Paper; A. F. Bock, St. Louis, The surgical treatment of Basedow's disease; John Young Brown, St. Louis, Some remarks on appendicitis; Sanger Brown, Chicago, Some anomalous conditions of the spinal cord, with report of cases; Eug. G. Carpenter, Cleveland, Posterior radicular neuritis; W. Cheatham, Louisville, Of what assistance has the serum treatment of diphtheria been to the general practitioner? Archibald Church, Chicago, The differential diagnosis and treatment of cerebral hemorrhage and cerebral softening; J. W. Cokenower, Des Moines, Ia., Neurotic deformities in children; A. H. Cordier, Kansas City, Ectopic pregnancy, clinical and pathologic phases; J. Homer Coulter, Chicago, Paper; Ephraim Cutter, New York, Beef—a war paper; Richard Dewey, Wauwatosa, Wis., Some cases of insanity in adolescence; Arch Dixon, Henderson, Ky., To drain or not to drain; Kennon Dunham, Cincinnati, The hypodermic syringe and its use in malaria; C. Travis Drennan, Hot Springs, Ark., Report of a case of anesthesia produced by mercury, with remarks; Sherwood Dunn, Los Angeles, Mothers and daughters; J. Rilus Eastman, Indianapolis, Diagnosis by inspection in the urinary tract; A. R. Edwards, Chicago, The diagnosis of abscess of the liver based upon a study of twenty-five cases; Jos. Eichberg, Cincinnati, Typhoid fever treated without cold baths; C. Fisch, St. Louis, The antitoxic and bactericidal properties of the serum of horses treated with Koch's new tuberculin (T. R.); F. R. Fry, St. Louis, Pressure symptoms after head injuries; A. H. Goelet, New York, The surgical treatment of fibroid tumors of the uterus; Spencer Graves, St. Louis, Appendicitis; H. Hatch, Quincy, Ill., Severe injuries from electricity, and what best to do; A. G. Hobbs, Mouth-breathing in children; Discussion opened by Dr. H. W. Loeb; B. W. Holliday, Cleveland, The civic aspect and therapy of some of the common neuroses; A. F. House, Cleveland, Symptoms and surgical treat-

ment of perforated intestinal ulcers; W. H. Humiston, Cleveland, Cocaine anesthesia in perincorrhaphy; C. C. Jacobs, Frostburg, Md., The treatment of obstructive lesions of the urinary tract, anterior to the bladder, with especial reference to the enlargement of the prostate gland; A. C. Klebs, Chicago, Paper; E. L. Larkins, Terre Haute, Ind., Appendicitis; F. F. Lawrence, Columbus, O., Hysterectomy; Elmer Lee, New York, The elimination of empiricism in the treatment of pneumonia; I. N. Love, St. Louis, The relations of the secular press to medicine and the public; C. F. McGahan, Aiken, S. C., The treatment of pulmonary phthisis; A. H. Meisenbach, St. Louis, A plea for early operation in cholelithiasis; L. Harrison Mettler, Chicago, Neuroses of gout; Robt. T. Morris, New York, Paper; Harold N. Moyer, Chicago, Paper; A. M. Owen, Evansville, Ind., Cathartics and constipation; A. J. Ochsner, Chicago, Treatment of hernia in old men; Curran Pope, Louisville, Ky., Sanitoriums a necessary factor in the treatment of chronic diseases; Joseph Price, Philadelphia, Paper; J. Punton, Kansas City, The growing needs of medical political organisation; D. C. Ramsey, Mt. Vernon, Ind., Municipal sanitation of tuberculosis; A. Ravogli, Cincinnati, Tuberculin in dermatology; B. Merrill Rickets, Cincinnati, Abdominal incision for ascites; Byron Robinson, Chicago, The classification of peritonitis; Enno Sander, St. Louis, The Carlsbad Springs of the United States of North America; E. W. Saunders, St. Louis, Therapeutic properties of infant foods; E. J. Senn, Chicago, The treatment of suppurating fistulous tracts; E. B. Smith, Detroit, Experimental surgery; J. O. Stillson, Indianapolis, Retro-bulbar optic neuritis; L. Strauss, St. Louis, Primary tuberculosis of the rectum with report of cases; J. A. Stucky, Lexington, Ky., Intratympanic surgery in chronic suppuration; J. B. Taulbee, Mt. Sterling, Ky., The treatment of wounds by the open method; H. M. Thomas, Chicago, Experimental work on the penetrability of vaporised medicaments in the air-passages; K. K. Wheelock, Fort Wayne, Ind., Plastic operation for reforming interpalpebral space; Alex. C. Wiener, Chicago, Congenital dislocation of the hip; Frank Woodbury, Philadelphia, Paper. Further titles of papers should be sent to Dr. Thomas Hunt Stucky, president, Louisville, or to Dr. H. W. Loeb, secretary, St. Louis, Mo.

The Central New York Medical Association will hold its thirtieth annual meeting at Buffalo, on Tuesday, October 17, 1897.

This association calls together the most progressive physicians of Central and Western New York, and has become widely known as a thorough and scientific working body. The Buffalo meeting promises to be a most successful and important one and should receive the coöperation of all progressive physicians in this and neighboring counties. All members of county societies within the jurisdiction of the association are eligible to membership after attending three consecutive meetings and the payment of $2 initiation fees. The following counties comprise the association: Onondaga, Cayuga, Seneca, Ontario, Wayne, Monroe, Chenango, Cortland, Genesee, Livingston, Madison, Orleans, Oswego, Wyoming, Yates and Erie. There is no reason why Niagara, Cattaraugus, Chautauqua and Allegheny counties should not join the association, and then Western New York would be fully represented. Erie county thus far has been feebly represented, only twenty members belonging to the association, while Monroe has more than double this number of members. The annual dues amount to $1, entitling the members to the volume of transactions.

Titles of papers to be read at the Buffalo meeting should be sent before October 1st to Dr. Edward B. Angell, president, 294 Alexander street, Rochester, N. Y., or to Dr. C. A. Van Der Beek, secretary, Rochester, N. Y., or may be left at this office. In our next issue we hope to publish the preliminary program.

The American Microscopical Society held its twentieth annual meeting at Toledo, O., August 5th, 6th and 7th. Papers of great importance were read by some of the members and a microscopical exhibition was held on August 6th. The address of the president, Prof. E. W. Claypole, of Akron, O., on Microscopic light in geological darkness, was an able and masterful delineation of the value of the microscope in the study of rocks. Another very interesting paper was read by Mr. Francis Scott Rice, of Steelton, Pa., on the Micro-structural characteristics of steel; another, on the Comparison of the phagocytic action of leucocytes in amphibians and mammals, by John M. Berry, Peterboro, N. Y., and one on the Comparative structure of the digestive tract, by Edith J. Claypole, Wellesley, Mass., attracted attention. On Friday afternoon the society was given a boat ride on the Maumee river and Lake Erie, which was thoroughly enjoyed by all who had the good fortune to attend. Syracuse was chosen as the next meeting place and the following were elected officers for 1897–'98: President, Prof. D. S. Kellicott, Ph. D.,

Columbus, O.; vice-presidents, Moses C. White, M. D., New Haven, Conn., and Veranus A. Moore, M. D., Ithaca, N. Y.; secretary, William C. Krauss, M. D., Buffalo, N. Y.; treasurer, Mr. Magnus Pflaum, Pittsburg, Pa. Elective members of the executive committee: D. E. Hoag, M. D., Toledo, O.; R. Aberdein, M. D., Syracuse, N. Y.; Edith J. Claypole, Ph. D., Wellesley, Mass.

The Physicians' Club of Buffalo, N. Y., was organised the early part of last winter. The object of the club is the careful consideration of subjects having to do with the science of medicine and the promotion of social intercourse among its members. The officers during the past year were: president, Dr. Thomas F. Dwyer; vice-president, Dr. A. E. Diehl; secretary-treasurer, Dr. Chas. E. Congdon.

At the last meeting, held at the house of Dr. Thomas B. Carpenter, 357 Pennsylvania street, the retiring president, Dr. Thomas F. Dwyer, read a paper on Twin pregnancy, after which the following officers were elected and installed for the coming year: president, Dr. A. E. Diehl; vice-president, Dr. E. M. Dooley; secretary-treasurer, Dr. J. J. Finerty; council, Drs. W. Scott Renner, D. J. Constantine, Thos. B. Carpenter, J. J. Walsh and J. Henry Dowd.

Book Reviews.

Eye-Strain in Health and Disease. With Special Reference to the Amelioration or Cure of Chronic Nervous Derangements without the Aid of Drugs. By Ambrose L. Ranney, A. M., M. D. Illustrated with thirty-eight wood engravings. Philadelphia, New York and Chicago: The F. A. Davis Company, Publishers. 1897.

The well-known author of this work, though his Text-book on Nervous Diseases, Applied Anatomy of the Nervous System, Treatise on Surgical Diagnosis, Practical Medical Anatomy, and the like, needs no introduction to the medical profession, as his works and papers, for some years past, have shown him to be an indefatigable, energetic investigator, seeking to advance the science and art of medicine.

The present volume comprises the substance of several monographs that the author has published from time to time during the past ten years in medical journals, with the addition of considerable new matter. The histories of many typical cases have been added with a view of illustrating some remarkable results of eye

treatment alone upon various forms of nervous disturbances that have persisted for years and failed to yield to any other form of treatment. Many of the views which the author advanced in his work on nervous diseases relative to the effects of eye strain upon the development of headache, neuralgia, sleeplessness, chorea, epilepsy, nervous prostration and insanity, are reiterated with strong clinical evidence to sustain them. The author's early convictions are strengthened by the new and large quantity of material presented, and he claims that many of those who were antagonistic to his theories a year ago are now enthusiastic in their support. The author asks his critics to bear in mind three facts—namely, that none of the cases here reported took any drugs while under his care, that they were chronic cases which had received no benefits from medication under skilful hands, and that many of them were made absolutely well by eye treatment alone.

Chapter I. is devoted to the bearings of eye-strain upon the duration of human life, and the keynote of the whole matter is thus enunciated, "that any excess of nervous expenditure to one organ over the normal amount which should be furnished, is done at the expense of the others sooner or later." In this chapter the relation between eye-strain and phthisis is especially considered, the author even citing his own case, because in his maternal ancestry phthisis had been extremely frequent and the duration of life materially lessened thereby. A high degree of latent hypermetropia, whose existence was unsuspected until atropine was instilled into his eyes, marked a turning point in his own physical state, and —the author infers—arrested any further tubercular progress.

The author makes the following surprising statement: "I have never yet encountered a case of typical phthisis in which eye-strain did not exist as a factor more or less potent, in my opinion, in causing and hastening its development." This is a remarkable fact if borne out by other observers and at once decides one of the first duties of the physician towards his tubercular patients. The author also suggests that in the future life insurance examiners will deem it necessary to take into consideration the possible existence of these hidden factors of disease before they pass final judgment.

Chapter II. takes up in a clear and understandable way the various tests of vision and ocular movements, also a translation of the terms so generally employed by ophthalmologists and so easily forgotten by the general practitioner.

Chapter III. is devoted to eye-strain as a cause of headache and neuralgia. Headaches are discussed under three prominent classes: the toxic, organic and reflex varieties. Of the latter the author cites many cases cured by relieving eye-strain.

Chapter IV. is devoted to the eye treatment of chorea. The author asserts that clinical experience has demonstated most positively a direct causal relationship between eye-strain and chorea. Cases are cited where again eye treatment has cured the chorea.

If such relationship does exist how is it possible for the great majority of choreatics to recover without eye treatment and in many cases without any well-defined mode of treatment?

Chapter V. is devoted to sleeplessness; Chapter VI. to eye-strain as a cause of chronic gastric and digestive disturbances; Chapter VII. to the eye treatment of epilepties; Chapter VIII. to the eye treatment of nervous prostration and insanity; Chapter IX. to the surgical treatment of anomalies of the ocular muscles; and in Chapter X. the author gives a few practical hints relative to eye-strain as a cause of abnormal eye conditions.

On the whole, the work is exceedingly instructive and entertaining; the author is an enthusiast on the subject and is happy in his own convictions. It would hardly be a wise policy to turn over indiscriminately to the operating ophthalmologist all cases of general neuroses for treatment, but surely some cases, perhaps many, would be fit candidates for this form of treatment. How a case of paresis, fully developed, of a specific nature is amenable to the graduated tenotomy treatment or prism treatment the reviewer cannot understand.

A good way to test any new rule, law or mode of treatment is to study the failures as well as the successes and then to pass judgment upon the former as well as upon the latter. There are other forms of reflex irritation besides eye-strain and in the treatment of any case of neurosis all organs should be carefully examined and treated.

The subject treated by Dr. Ranney has certainly gained ground and thus is entitled to a conspicuous though not an overshadowing place in the methods or modes of treatment of the functional neuroses.

The publishers have in their usual excellent way added to the value of the book by the careful typographical work bestowed upon it. W. C. K.

DISEASES OF THE EYE AND OPHTHALMOSCOPY. A handbook for physicians and students. By A. EUGEN FICK, M. D., University of Zurich. Authorised translation by Albert B. Hale, A. B., M. D., one of the Ophthalmic Surgeons to the United Hebrew Charities; Consulting Ophthalmic Surgeon to Charity Hospital, Chicago. Octavo, pp. xvi.—488. With a glossary and 158 illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1896.

While it can hardly be said that there is a real need of another "handbook" on diseases of the eye, even to represent German practice, yet this work of Dr. Fick's is a good one of its kind and will find many admirers. It covers the usual ground, omitting pathological hypotheses and details and references to authorities. The methods of examinations are described in considerable detail and constitute a most important part of the book. They include the function-tests for acuteness of vision, refraction, accommodation, light-sense, color-sense, field of vision, binocular vision and

squint, and the objective methods of examination by Keratoscopy, focal or oblique illumination, ophthalmoscopy, skiascopy and palpation. Then follows a clear, concise and systematic description of the various diseases of the eye and its appendages and their treatment, together with the operations performed. Ocular therapeutics are up-to-date from the German standpoint.

The work is well illustrated and the colored engravings add materially to the elucidation of the text. The translator is to be congratulated on his success in rendering it into so good English.

Those who desire to acquaint themselves with the principles of German ophthalmology will find them well stated in this handbook of Dr. Fick. A. A. H.

DISEASES OF THE EAR, NOSE AND THROAT and their Accessory Cavities. A Condensed Text-book. By SETH SCOTT BISHOP, M. D., LL. D., Professor in the Chicago Post-Graduate Medical School and Hospital; Surgeon to the Illinois Charitable Eye and Ear Infirmary; Consulting Surgeon to the Illinois Masonic Orphans' Home and to the Silver Cross Hospital of Joliet. Illustrated with 100 colored lithographs and 168 additional illustrations. Royal 8vo, pages xvi.—496. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

This book is written in the interests of medical students and general practitioners in compliance with numerous requests from both of these important groups, and is not intended to replace exhaustive treatises on these subjects. Thus the author announces in his preface. That he has conscientiously attempted to fill this rôle cannot be gainsaid. The relationship between diseases of the ear, nose and throat have been recognised by the profession for a long time, while diseases of the eye constitute a separate field of specialism.

This work is well printed in plain, large-faced type and is quite copiously illustrated. Some of the engravings are original and a few of them printed in colors. We have been impressed with the author's account of the relationship between uric acid and hay fever—a factor in the causation of this disease which is often overlooked by specialists, we fear, or else given too little weight. Taken all in all we regard this treatise as a valuable contribution to the literature of the subjects with which it deals and believe it will be found a useful addition to the libraries of those for whom it is more especially written.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Volume IX. Ninth session held at Nashville, Tenn., November 10, 11 and 12, 1896. Edited by Dr. William Elias B. Davis, Secretary, Birmingham, Ala. Philadelphia: William J. Dornan, Printer. 1897.

Again this distinguished association sends to the professional world a volume of great value. Excellent as have been its pre-

decessors, this book takes rank as one of the best volumes of transactions issued by this or any other special medical society. Many of the papers have been published in medical magazines, but in this volume only will be found the complete discussions which are strong, scientific and instructive. One of the most thoroughly enjoyable, scholarly and helpful papers in the book is by Dr. Lewis S. McMurtry, of Louisville, entitled, The evolution and perfection of aseptic surgical technique. It merits the attention of every practical surgeon. It would be interesting to analyse this paper as well as several others in the book, but just now it is impossible and perhaps unnecessary to do so, inasmuch as it is in the hands of every member of the association and every general as well as every gynecologic surgeon will be sure to obtain it.

A Clinical, Pathological and Experimental Study of Fracture of the Lower End of the Radius. With displacement of the Carpal Fragment Toward the Flexor or Anterior Surface of the Wrist. By John B. Roberts, A. M., M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic; Professor of Surgery in the Woman's Medical College of Pennsylvania, etc. Octavo, pp. 76. With 33 illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

The author of this brochure is an experienced anatomist and a forceful teacher of the subject, hence his writings not only command attention but a respectful examination. Perhaps there is no injury to bone structure more common than fracture of the lower end of the radius, with which the name of Colles has become almost classically associated. It, therefore, becomes every surgeon and especially every general practitioner in the country to carefully examine this monograph and to ponder its valuable teachings.

Fourteenth Report of the State Board of Health of the State of New Hampshire from July 1, 1895, to November 1, 1896. Irving A. Watson, M. D., Secretary. Concord: Edward N. Pearson, Public Printer. 1897.

The state of New Hampshire is fortunate in having an experienced sanitarian at the head of its health department in the person of Dr. Irving A. Watson, who acts as secretary of its board of health. The volume before us contains much of interest relating to questions of public health and vital statistics and may be examined with profit by all sanitarians.

Flint's Medical and Surgical Directory of the United States and Canada. Issued annually. 1897. Compiled by A. L. Chatterton. New York: J. B. Flint & Co., 104 Fulton street. 1897.

Medical directories are growing more numerous year by year; and some of them are not as accurate as we could wish. The one before us, however, is perhaps as nearly so as it would be possible

to make it considering the difficulties to be overcome. It has one decided advantage—namely, size and conciseness. It would be a good plan for compilers of directories to classify the names by counties, instead of arranging them alphabetically by cities, villages and hamlets. It is proposed to issue this directory annually, which commends it to favor, since errors can be corrected with greater promptitude than in biennial or triennial directories. Another advantage is, that Canada is embraced in the territory covered by this work.

LECTURES ON THE TREATMENT OF FIBROID TUMORS OF THE UTERUS, MEDICAL, ELECTRICAL AND SURGICAL. By FRANKLIN H. MARTIN, M. D., Professor of Gynecology Post-Graduate Medical School of Chicago; Surgeon Woman's Hospital of Chicago, etc. Chicago: The W. T. Keener Co. 1897.

This compilation of lectures by an experienced author is somewhat marred by the fact that it has evidently been published with a view, in large part, to advertise the Post-graduate Medical School of Chicago. It contains a number of illustrations that relate to that institution, which need not be regarded as necessary to elaborate the text. Nevertheless, it contains considerable valuable material that will be examined with interest by gynecologic surgeons. This remark has especial application to that part of the book devoted to the operative treatment of these tumors.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK. Twenty-ninth Annual Meeting, held at Rochester, N. Y., October 20, 1896. WILLIAM C. KRAUSS, M. D., editor. BUFFALO MEDICAL JOURNAL Print. 1897.

This association is fast acquiring a reputation for good work and it places its achievements upon record with skilful judgment. No association that fails to publish its scientific proceedings does itself justice. These volumes can be bound together in groups of five and this will make the association's work accessible in the library. The papers have already been published in the JOURNAL, hence need not be commented upon at this time. The secretary, Dr. William C. Krauss, is an experienced editor and has presented this little volume in excellent form.

TRANSACTIONS OF THE AMERICAN MICROSCOPICAL SOCIETY. Nineteenth Annual Meeting, held at Carnegie Library, Pittsburg, Pa., August 18, 19 and 20, 1896. WILLIAM C. KRAUSS, M. D., Secretary. Buffalo: A. T. Brown Printing House. 1897.

This handsome volume is a credit to the society whose proceedings it records. The editor has displayed skill and judgment in its preparation and the mechanical execution of the book is

beyond criticism except in one particular—it deserves a more permanent cover. It is a work that ought to stimulate more frequent and thorough work with the microscope in medicine as well as in the other sciences. Some of the illustrations, too, are extremely beautiful. Taken by and large it is the most complete contribution to the literature of microscopy that the year has witnessed.

TWENTY-SECOND ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF THE STATE OF MICHIGAN, for the Fiscal Year ending June 30, 1894. HENRY B. BAKER, M. D., Secretary. Lansing: Robert Smith & Co., State Printers and Binders. 1896.

The reports of this board are always valuable and constitute decided contributions to the literature of public sanitation. The board has an extensive library and publishes in each annual report a list of accessions thereto for the previous year. The secretary, Dr. Henry B. Baker, is an experienced sanitarian and his writings and compilations are often authoritatively quoted. This volume is uniform with its predecessors and is a welcome addition to the files.

THE BLIND AS SEEN THROUGH BLIND EYES. By MAURICE DE LA SIZERANNE. Authorised translation from the second French edition, by F. Park Lewis, M. D., Member of the Board of Trustees of the New York Institution for the Blind. Duodecimo, pp. 170. New York: G. P. Putnam's Sons, 27 West Twenty-third street. 1893.

This is an interesting work, dealing with the characteristics of the blind, physically, intellectually and morally, with Valentine Haüy and his work, with the school for the blind and with the blind in society, as viewed by a Frenchman who himself was blind. The story is told in a most fascinating way and every friend of the blind should read it. A. A. H.

SURGICAL HINTS FOR THE SURGEON AND GENERAL PRACTITIONER. By HOWARD LILIENTHAL, M. D., Assistant Attending Surgeon to Mt. Sinai Hospital, New York City. New York: International Journal of Surgery Company. 1897.

This small brochure contains personal observations and suggestions by the author which should prove useful in refreshing one's memory when he does not operate every day. It is handsomely printed and is of a convenient size for the pocket.

ANNUAL REPORT of the Supervising Surgeon-General of the Marine Hospital Service of the United States. For the fiscal year 1896. Washington: Government Printing Office. 1896.

This volume is especially interesting to quarantine officers and contains much valuable information upon cognate branches of

public health service. The Marine Hospital Service has gained a reputation for the excellence of its reports and this one keeps full pace with its predecessors. Its value would, however, be considerably enhanced if it were bound in muslin. It is too large a book to trust to paper covers.

BOOKS RECEIVED.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L Stedman, M. D., New York City. In twenty volumes. Volume XI. Diseases of the Nervous System. New York: William Wood & Co. 1897.

The American Text-Book of Operative Dentistry. In contributions by eminent American authorities. Edited by Edward C. Kirk, D. D. S., Professor of Clinical Dentistry, University of Pennsylvania, Department of Dentistry. In one very handsome octavo volume of 699 pages, with 751 engravings. Cloth, $5.50; leather, $6 50; net. Philadelphia and New York: Lea Brothers & Co., Publishers.

Transactions of the Medical Society of the State of New York for the Year 1897. Frederic C. Curtis, M. D., Secretary. Philadelphia: William J. Dornan, Printer. 1897.

The Johns Hopkins Hospital Reports. Volume VI. Baltimore: The Johns Hopkins Press. 1897.

Annual Report of the State Board of Charities for the Year 1896. Transmitted to the legislature February 25. 1897. Albany and New York: Wynkoop Hallenbeck Crawford Co., State Printers. 1897.

The Menopause. A consideration of the phenomena which occur to women at the close of the child-bearing period, with incidental allusions to their relationship to menstruation. Also a particular consideration of the premature (especially the artificial) menopause. By Andrew F. Currier, A. B., M. D., New York City. Duodecimo. pp. xvi.—309. New York: D. Appleton. 1897.

The Roller Bandage with a Chapter on Surgical Dressing. By William Barton Hopkins, M. D., Surgeon to Pennsylvania Hospital. Illustrated. Fourth edition. Price, $1.25. Philadelphia: J. B. Lippincott Co. 1897.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England. Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Prac-

tice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume II. Seventh series. 1897. Octavo, pp. xii.—371. Philadelphia: J. B. Lippincott Co. 1897.

Annual of the Universal Medical Sciences and Analytical Index. A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sajous, M. D., and seventy associate editors, assisted by over 200 corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Five volumes. Philadelphia, New York, Chicago: The F. A. Davis Co., Publishers. London: F. J. Rebman. Australian agency: Melbourne, Victoria. 1897.

The Diseases of Women. A Handbook for Students and Practitioners. By J. Bland Sutton, F. R. C. S., Eng., Surgeon to the Chelsea Hospital for Women; Assistant Surgeon, Middlesex Hospital, London, and Arthur E. Giles, M. D., B. Sc., London, F. R. C. S., Edin., Assistant Surgeon, Chelsea Hospital for Women, London. Small 8vo, pp. 436. Illustrated. Price, $2.50, net. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

Literary Notes.

The *Georgia Journal of Medicine and Surgery* made its bow to the professional public, July 15, 1897. It is edited by Drs. St. J. B. Graham, D. E. Dudley, and is published at Savannah, Ga. While we bespeak success to our new contemporary, we doubt the propriety of its publishing what it calls its consultation columns. Medical journals that have heretofore pursued a similar policy have not risen to the high plane to which our Georgia friend aspires and to which its long list of honorable collaborators would seem to give it appropriate place.

The tenth annual report of the managers of the St. Lawrence State Hospital has been issued. It covers the period for the year ending September 30, 1896, during which there were 157 men and 133 women admitted as patients. There were 155 men and 120 women discharged and died during the year and a total of 1,268 patients remained in the hospital under care and treatment. The superintendent, Dr. Peter M. Wise, is well known in Buffalo as a competent alienist and an administrative officer of ability. The successful management of the hospital is assured during his incumbency.

The Needs and Rights of Old Age is the title of a doctorate address delivered at the commencement exercises of the hospital

medical college, at Louisville, Ky., July 1, 1897, by Prof. Isaac Newton Love, M. D., of St. Louis. The occasion was a happy one, the wealth and fashion of Louisville were assembled at McCauley's theatre and Professor Love was at his best. This scholarly address, that abounds in classic prose and poetic lore, will hereafter be quoted as one of the best doctorate addresses of the season. It was a graceful act of the Louisville college to invite Dr. Love to be the guest of honor at its commencement and the learned St. Louisian returned the courtesy with interest.

THE Cincinnati hospital has issued its twenty-sixth annual report to the mayor of Cincinnati, which embraces the fiscal year ending December 31, 1896. The hospital buildings occupy an entire square, being 448 feet from north to south and 340 feet from east to west. The number of patients treated during the year, exclusive of the receiving ward, was 5,964 and the appropriation by the city for the expenses of the hospital was $114,000.40. It is doubtful if the same number of patients have been cared for at as small an expenditure anywhere in the country. The advantages growing out of a large general hospital supported by the city treasury are manifold, and the example of Cincinnati is worthy of imitation—if not emulation.

Miscellany.

STUDY OF THE AMERICAN MEDICINAL FLORA.

THE sub-commission of the Pan-American Medical Congress appointed to study the medicinal plants of the United States has entered into an association with the Smithsonian Institution for that purpose. The attention of our readers is called to the respective circulars issued by these organisations, which we print below:

SMITHSONIAN INSTITUTION,
WASHINGTON, D. C., May 28, 1897.

Dear Sir—The Smithsonian Institution has undertaken to bring together all possible material bearing on the medicinal uses of plants in the United States. Arrangements have been made with a body representing the Pan-American Medical Congress, the sub-commission on medicinal flora of the United States, to elaborate a report on this subject, and the material when received will be turned over to them for investigation.

The accompanying detailed instructions relative to specimens and notes have been prepared by the sub-commission.

All packages and correspondence should be addressed to the Smithsonian Institution, Washington, D. C., and marked on the outside medicinal plants for the United States National Museum. Franks, which will carry specimens, when of suitable size, together with descriptions and notes, free of postage through the mails, will be forwarded upon application. Should an object be too large for transmission by mail, the sender is requested, before shipping it, to notify the institution, in order that a proper authorisation for its shipment may be made out.

Respectfully,

(Signed) S. P. LANGLEY, *Secretary.*

INSTRUCTIONS RELATIVE TO MEDICINAL PLANTS.

The Pan-American Medical Congress, at its meeting held in the City of Mexico in November, 1896, took steps to institute a systematic study of the American medicinal flora, through the medium of a general commission and of special sub-commissions, the latter to be organised in the several countries. The sub-commission for the United States has been formed and consists of Dr. Valery Havard, U. S. A., chairman; Mr. Frederick V. Coville, botanist of the United States department of agriculture; Dr. C. F. Millspaugh, curator of the botanical department of the Field Columbian Museum, Chicago; Dr. Charles Mohr, state botanist of Alabama; Dr. W. P. Wilson, director of the Philadelphia commercial museums; and Prof. H. H. Rusby, of the New York College of Pharmacy. This sub-commission solicits information concerning the medicinal plants of the United States from every one in a position to accord it. The principal points of study are as follows:

(1) Local names; (2) local uses, together with historical facts; (3) geographical distribution and degree of abundance in the wild state; (4) is the plant collected for market and, if so, (*a*) at what season of the year? (*b*) to how great an extent? (*c*) how prepared for market? (*d*) what is the effect of such collection upon the wild supply? (*e*) what price does it bring? (*f*) is the industry profitable? (5) is the plant, or has it ever been, cultivated, and if so, give all information on the subject, particularly as to whether such supplies are of superior quality and whether the industry has proved profitable; (6) if not cultivated, present facts concerning the life history of the plant which might aid in determining methods of cultivation; (7) is the drug subjected to substitution or adulteration, and if so, give information as to the plants used for this purpose.

While it is not expected that many persons will be able to contribute information on all these points concerning any plant, it is hoped that a large number of persons will be willing to communicate such partial knowledge as they possess.

It is not the important or standard drugs alone concerning which information is sought. The sub-commission desires to compile a complete list of the plants which have been used medicinally, however trivial such use may be. It also desires to collect all obtainable information, historical, scientific and economic, concerning our native and naturalised plants of this class, and, to that end, invites the coöperation of all persons interested. Poisonous plants of all kinds come within the scope of our inquiry, whether producing dangerous symptoms in man or simply skin inflammation, or, as "loco-weeds," deleterious to horses, cattle and sheep. In this respect the general reputation of a plant is not so much desired as the particulars of cases of poisoning actually seen or heard from reliable observers. It is believed that much interesting knowledge can be obtained from Indians, Mexicans and half-breeds, and that, consequently, Indian agencies and reservations are particularly favorable fields for our investigation. Such knowledge will be most acceptable when based upon known facts or experiments.

In order to assist in the study of the habits, properties and uses of medicinal plants, the sub-commission undertakes to furnish the name of any plant specimen received, together with any desired information available.

Owing to the diversity in the common names of many plants it will be necessary for reports, when not furnished by botanists or others qualified to state the botanical names with certainty, to accompany the same with some specimen of the plant sufficient for its identification. While the sub-commission will endeavor to determine the plant from any portion of it which may be sent, it should be appreciated that the labor of identification is very greatly decreased, and its usefulness increased, by the possession of complete material, that is, leaf, flower and fruit, and in the case of small plants, the underground portion also. It is best to dry such specimens thoroughly in a flat condition, under pressure, before mailing. While any convenient means for accomplisbing this result may be employed, the following procedure is recommended: Select a flowering or fruiting branch, as the case may be, which when pressed shall not exceed 16 inches in length by 10 inches in width. If the plant be a herb 2 or 3 feet high, it may be doubled to bring it within these measurements. If it possess root leaves, some of these should be included. Lay the specimen flat in a fold of newspaper and place this in a pile of newspapers, carpet felting, or some other form of paper which readily absorbs moisture and place the pile in a dry place under a pressure of about 20 to 30 pounds, sufficient to keep the leaves from wrinkling as they dry. If a number of specimens are pressed at the same time, each is to be separated from the others by 3 or 4 folded newspapers or an equivalent in other kinds of paper. In 12 to 24 hours these papers will be found saturated with the absorbed moisture and the

fold containing the specimen should be transferred to dry ones. This change should be repeated for from 2 to 5 days according to the state of the weather, the place where the drying is done, the fleshiness of the specimens, and the like. The best way to secure the required pressure is by means of a pair of strong straps, though weights will do. The best place for drying is beside a hot kitchen range. When dry the specimens should be mailed between cardboards or some other light but stiff materials which will not bend in transit.

It is a most important matter that the name and address of the sender should be attached to the package and that the specimens, if more than one, should be numbered, the sender retaining also specimens bearing the same number, to facilitate any correspondence which may follow. The sub-commission requests that, so far as practicable, all plants sent be represented by at least four specimens.

(Signed) H. H. RUSBY, M. D.,
Chairman of the General Commission, New York College of Pharmacy.

VALERY HAVARD, M. D.,
Chairman of the Sub-Commission, Fort Slocum, Davids Island, N. Y.

A LARGE proportion of what are known as second-hand corks are said on good authority to contain disease germs (*New York Journal*). Most of the second-hand corks are gathered in various parts of the city by scavengers. It makes no difference to the scavenger how vile the spot may be where the cork is found. It may come out of a cesspool or sewer, from a garbage heap, an ash barrel or bar-room sweepings. It's all the same to the scavenger. All he seeks is the filling of his pail with corks, whether they be black with dirt or of the cleaner variety. For a pailful he receives from twenty-five to thirty cents. The purchaser is some East side cork dealer, who washes them over with muriatic acid and brightens their appearance. Then he in turn sells the corks to second-class bottlers for from ten to twelve cents a gross.

These bottlers may be found in great number in the thickly populated districts of the city. Many of their shops are located in basements or cellars. Some of these basements and cellars are damp and unhealthy. Then certain bottlers have their stables on the same floor, in the same room, where the bottling is done. Soda water bottled in these places is sold for a cent a glass or bottle. Its varied coloring is due to the use of aniline. The manufacturer uses on an average five pounds of sugar to make a gallon of syrup. Often glucose is used instead, although saccharine is coming into favor as a cheap substitute for sugar. About an ounce of syrup is used to each bottle of soda water.

The second-hand corks are soaked in water, so that they can be driven into the bottles. This forcing process sends all the filth and dirt, still on the cork, into the soda water in the bottle, and this mixture is what thousands of men, women and children of the tenement districts are drinking under the name of soda water, sarsaparilla and ginger ale.

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Original Communications.

DYNAMIC ILEUS FOLLOWING OPERATIONS INVOLVING THE ABDOMINAL CAVITY, WITH REMARKS ON ADYNAMIC ILEUS.[1]

BY F. BLUME, M. D., Allegheny, Pa.,

Gynecologist to the Allegheny General Hospital and Pittsburg Free Dispensary; obstetrician to the Roselia Maternity Hospital; consulting gynecologist to the Mercy Hospital; Fellow American Association of Obstetricians and Gynecologists.

INTESTINAL obstruction following operations involving the abdominal cavity has within the past few years been frequently the subject of discussion in societies and journals. Quite a number of cases have been reported and from the evidence which they present we are led to conclude that this grave complication is by no means of such rare occurrence as hitherto believed, and that it demands our earnest consideration to correct old views and to establish more precise indications, which may guide us in diagnosis and treatment.

A decided progress in this direction was made when Olshausen,[2] in 1887, in an article read before the Berlin Obstetrical and Gynecological Society, called attention to a form of intestinal obstruction which had not yet been recognised, a paralysis of the intestine not dependent upon septic peritonitis. The symptoms in these cases are: temperature normal or but slightly elevated, in some instances even subnormal; pulse-rate increased, some vomiting. On the second or third day after operation, or even later, the symptoms of collapse manifest themselves. The pulse is rapid and feeble, the abdomen becomes more and more distended, retching and vomiting more frequent. Neither gas nor feces are expelled

1. Read before the American Association of Obstetricians and Gynecologists at Niagara Falls, August 19, 1897, and published in the *Annals of Gynecology and Pediatry*.

by the rectum. The general condition of the patient during the first few days appears to be good. Nothing is observable by which the development of so serious a complication can even be suspected until the abdominal symptoms become more pronounced. Death ensues between the fourth and tenth day after the operation and results from intoxication of the decomposed intestinal contents. Post mortem examination reveals the absence of peritonitis. Olshausen sees in prolonged eventration of the bowels an important etiological factor of this condition.

Notwithstanding the fact that competent observers have confirmed the investigations of Olshausen, there is still difference of opinion in regard to the causes of this variety of adynamic ileus. The opponents of this theory are not satisfied with the ordinary post mortem examination; they insist on bacteriological examinations to exclude sepsis. It is not my intention to enter upon a discussion of this theory. I will but briefly refer to an interesting article of Otto Engstrem,[3] published this year. This author gives his experience with four cases of intestinal paralysis following abdominal operations. Everyone of the patients died, although in two of them a secondary operation was performed. Post mortem examinations showed the absence of peritonitis. In the last case a careful bacteriological examination was made with negative result. Reviewing the investigations of other observers, he arrives at the conclusion that paralysis of the intestines can and does occur after operations involving the abdominal cavity without infection at the time of the operation. Eventration and prolonged manipulations of the bowels are the most potent etiological factors, causing irritations of the nerves of the mesentery and the gutwall and leading to changes in the circulation. From his own experience he can confirm the statement of other observers that a paresis of the intestinal wall can be produced by strong saline purgatives, and it appears to be by no means impossible that, as a consequence of their use, a weakened condition of the gutwalls is created before the operation. He looks upon the increased susceptibility of the nervous system, often so marked in patients before operation, as a predisposing etiological factor.

There is hardly a surgeon who cannot recall a case in which the symptoms described above presented themselves, where the prognosis seemed to be favorable during the first few days and which ended fatally from intestinal obstruction before a week had passed by. The diagnosis remained uncertain; even the autopsy

did not give a satisfactory explanation. Such a case came under my observation in April, 1896. The patient, from whom I had removed a right pyosalpinx, was very restless after operation and could scarcely be managed. General condition good on the second and third day. In the middle of the fourth day the symptoms of intestinal obstruction developed; temperature, 99°; pulse, 130. Peristalsis was perceptible from the second to the fourth day. Collapse in the morning of the fifth day; temperature, 97 3-5°; pulse, 142. Death towards the end of the fifth day. Autopsy: the intestines enormously distended, their peritoneal covering slightly injected, but otherwise normal in appearance. No adhesions, no evidence of peritonitis. This post mortem examination made a deep impression upon me.

I have presented to you this brief sketch of one type of adynamic ileus to bring out certain points and conditions which more or less are associated with every form of intestinal obstruction and to which reference will have to be made repeatedly later on. It may serve, therefore, as an introduction to the study of dynamic ileus, to which I now invite your attention.

The first case of dynamic ileus following operation which I have been able to find in the literature at my disposal, occurred in 1887 in Olshausen's clinic and was published in 1888 by P. Reichel,[4] one of his assistants. It was a case of vaginal hysterectomy for cancer of the cervix uteri. The patient did well the first days. No rise of temperature. Nausea, but no vomiting. The pulse-rate remained above normal and increased to 140 on the third day. Abdomen distended, marked peristalsis, visible through the thin abdominal walls. No gas or feces expelled by the rectum. Enemata and stomach-washing gave no relief. The abdomen was opened on the seventh day. The small intestines were greatly distended, their serous coat strongly injected, but smooth and glistening. The lower part of the ileum, about five inches from the ileo-cecal valve, and a portion of the mesentery were adherent to the vaginal wound. On separating the adhesions three to three and one-half inches of this part of the bowel were found to be firmly contracted, resembling a solid cord. All efforts to move the intestinal contents along by compression and thus dilate the contracted portion failed. The patient died on the table.

Numerous cases of intestinal obstruction after operation have been observed in which the ante- or post mortem examination showed that a few inches of the gut were "collapsed" or "con-

tracted." Either a constriction by peritoneal bands, or an acute flexure, or some other mechanical obstruction has been given as a causative factor; they, therefore, do not belong to the form of obstruction now under consideration.

I have found but two more cases recorded which illustrate the dynamic variety of ileus following operation—the cases of my friend Dr. X. O. Werder. They are well known to you as they were made a part of the exceedingly interesting paper which Dr. J. W. Long[5] presented to this association at the Richmond meeting last year.

I wish to submit to your consideration today a brief report of a case of dynamic ileus which I saw early last fall.

Mrs. M., aged 36 years, mother of two children, very nervous and emaciated. Large unilocular intraligamentous cyst of right ovary, adherent to bowel and omentum.

Ovariotomy, September 29, 1896. Patient was very weak after the operation, but reacted well after the use of stimulants. Nausea and vomiting during the first twenty-four hours. Slight elevation of temperature; pulse-rate remained above normal. On the second day she was given and retained small doses of hot water and broth. Gas was expelled by the rectum. Her general condition improved and at the end of the second day with normal pulse and temperature, she seemed to be quite comfortable and the case looked very favorable. In the following night, early in the morning, she again commenced to vomit and for the first time complained of colicky pain in her abdomen, which was slightly distended. Increased peristalsis was audible; gurgling sounds could be heard at the bedside. Her condition grew gradually worse towards the end of the third day. The temperature varied between 99° and 101°, the pulse-rate between 100 and 120. All attempts to obtain a movement of the bowels by cathartics and intestinal injections resulted in failure. The distention of the abdomen increased. The patient became very nervous and restless and the symptoms of collapse began to manifest themselves. Fecal vomiting occurred about seventy-six hours after operation. Half an hour later I found her profoundly collapsed with a pulse of 150, hardly perceptible, no peristaltic action of the bowels ascertainable. The diagnosis of intestinal obstruction dependent upon some mechanical cause seemed to be certain.

The patient having been etherised I reopened the incision. The small intestines were very much distended, their peritoneal covering slightly injected, smooth and glistening. Six inches above the ileocecal valve and for a distance of about ten inches the ileum was firmly contracted, its lumen completely obliterated. The contracted portion was strongly wrinkled as if a purse-string suture had been

applied and tightly drawn. At its proximal end there was a slight abrasion. Immediately above the contracted portion the bowel was enormously distended and sacculated, showing the effect of the violent peristaltic action. The bowel below it was soft, empty and collapsed. No adhesions, no fluid in the abdominal cavity, no evidence of peritonitis.

An attempt to force gas into the contracted portion by compressing the bowel above it was not successful. I opened the ileum and a large amount of gas came away. Having stitched the bowel, I again turned my attention to the contracted portion, which was found to be unchanged. By this time the patient was almost pulseless, and I had to close the abdomen quickly. She recovered from the anesthetic and appeared to be improving for several hours, when, early in the morning, coma supervened. She died in the middle of the fourth day after the first operation. No autopsy.

I regret to say that I have nothing to offer which could satisfactorily explain dynamic ileus. When I saw the firmly contracted portion of the ileum it at once reminded me of the experiment conducted by Dr. Robert T. Morris[6] at the Toronto meeting of this association, while demonstrating the mechanism of ileo-intussusception in a rabbit. A sudden spasm of the circular muscle of the bowel was produced by touching the ileum with a bit of carbonate of sodium. The caliber of the bowel was decidedly reduced and intussusception occurred.

From the evidence which this experiment and the cases under discussion present it seems to be at least not improbable that certain toxic substances, the result of decomposition of the intestinal contents play the most important part in the etiology of dynamic ileus. I look upon them as the exciting causes, which under certain circumstances may produce tonic contractions, a tetanic condition of a segment of the intestine, which not only continues under anesthesia but, at least for hours, even after death. This contraction, as the reports show, is found in those parts of the bowel which are nearest to the field of operation and exposed to manipulations and injuries. Here a point of least resistance is created in the intestinal tube by the irritations of the nerves supplying this part, by the disturbance of their mechanism and by the changes which take place in the gutwall.

I do not attempt an explanation of the very extensive tonic contractions found in Dr. Werder's first case. As in the other cases the lower portion of the ileum was involved, but besides this the whole large intestine was in a state of firm contraction, a condition which I think it is impossible to satisfactorily explain at the present

time. Further investigations into the pathology of dynamic ileus are needed to solve this and allied questions.

I beg to direct attention to the fact that in none of the four cases on record has a correct diagnosis been made. In my own case I arrived at the opinion that it was a mechanical obstruction I had to deal with. The symptomatology of this case is indicative of the presence of an obstruction, probably in the lower portion of the small intestine, but nothing more. Whether this obstruction was due to a tonic contraction, or to a flexure, or constriction, or any other form of mechanical obstruction, could not be determined.

As stated in the report, the patient was doing well at the end of the second day and during the following night until in the morning, when she complained of pain in the abdomen, was nauseated and began to vomit. When I saw her in the forenoon the abdomen was slightly tympanitic, peristalsis increased, pulse accelerated. The pain complained of was not limited to a certain point, but extended over the whole abdomen and was thought to be dependent upon the active peristaltic movements of the intestines. These conditions are so familiar to us; we meet with them so often in favorable cases at this period after operation that we do not regard them as unusual. We know them to improve quickly after a movement of the bowels is obtained.

I saw the patient again in the afternoon. Her condition had grown worse. The inability to get the bowels to act, the increased peristalsis and the manifestations of threatening collapse suggested the probability of intestinal obstruction. The advisability of reopening the abdomen was carefully considered, but the diagnosis was by no means clear at this time to justify interference.

It is probably more interesting to the surgeon than important to the welfare of the patient, to attempt to differentiate in cases of post-operative intestinal obstruction between the various forms of ileus. Dynamic and mechanical ileus, to which it clinically belongs, as well as the adynamic variety, which I have described in my introductory remarks, and the ileus of sepsis, all lead to the same end—death—unless relieved by timely surgical interference. For practical purposes such differential diagnosis is hardly needed. We must distinguish, however, between these forms of ileus and the very obstinate constipation, often so difficult to overcome after operations. This differential diagnosis is extremely difficult early in the course of the disease, in those instances where the symptoms are less distinct. Even fecal vomiting does not remove the doubt,

for it sometimes occurs in favorable cases, *i. e.*, in cases which get well without surgical interference. It was not present in Olshausen's cases of adynamic ileus and occurred late in my case of dynamic ileus.

There can be no doubt that these cases of obstinate constipation represent a mild form of that type of adynamic ileus described by Olshausen. In some instances, however, we must regard them as the result of an infection, of a slight localised peritonitis, which quickly subsided. As in cases of septic ileus, peristalsis is absent or greatly diminished, even hardly perceptible. This most important symptom which distinguishes obstinate constipation and the various forms of adynamic ileus from dynamic and mechanical ileus is apparently often overlooked or its value underrated.

During the progress of the disease the abdominal symptoms become more pronounced, the pulse more accelerated. The patient grows nervous and restless, she seems to realise that her life is in danger. Clearly, this condition can no longer be confounded with that of obstinate constipation. The only question to decide at this advanced stage is the differential diagnosis between septic peritonitis and ileus. The general condition of the patient during the first few days, the absence or slight elevation of temperature and the character and rate of the pulse at this time permit us to exclude sepsis as the probable lesion. The continued increased peristaltic action confirms this view and makes it clear that an occlusion of the bowel exists.

We have been, and still are, under the influence of that doctrine which sees in every case of intestinal obstruction subsequent to operation in the first place a case of septic peritonitis, whether there be a rise of temperature or not. It is the influence of this doctrine which has stilled the hands of many a surgeon until the patient was beyond the reach of human aid. So deeply rooted is this doctrine that even in those cases which die on the fourth day or later, and in which at the autopsy no visible evidence of peritonitis can be found, sepsis is diagnosticated, or at least suspected, and the operator criticises himself and his assistants for having infected the patient. It is well known that a patient may die of acute fulminating peritonitis in from twenty to thirty-six hours after operation without any symptoms of peritonitis in the abdominal cavity, but why these symptoms should not develop after sufficient time for their development has elapsed before death ensues is certainly difficult to comprehend. The true cause of death in these cases which

terminate fatally at or after the fourth day is by no means clear. Is it not fair to assume that these patients do not die from peritonitis alone, if it be admissible to thus term this condition, but that death must be attributed far more to the toxic substances which result from decomposition of the intestinal contents?

Whenever a doubt remains as to the true nature of the disease, the patient should have the benefit of the doubt. The abdomen should be reopened, or in cases following vaginal hysterectomy an exploratory incision should be made. The gravity of the condition and the slight danger attending these methods of investigation render them justifiable.

The importance of an early diagnosis should never be lost sight of. Collapse may set in unexpectedly, making surgical interference hopeless. The early profound collapse in my case must be attributed to the very poor health of the patient, whose vitality was far below par when I first saw her. With the appearance of collapse peristalsis ceased, the intestines being over-distended and paralysed. There are no points of distinction between the various forms of ileus—including the paresis of general peritonitis—at this stage of the disease.

I have omitted to differentiate between dynamic ileus and the various types of mechanical ileus. Dynamic ileus belongs clinically to the mechanical variety, from which it cannot be distinguished if the obstruction occurs in the same portion of the intestine. A discussion of the accessory symptoms, which are observable in cases of mechanical ileus, and which differ according to the location and character of the obstruction, is deemed to be beyond the scope of this article.

Dynamic ileus following operations must be regarded as a surgical disease, and surgical treatment, in order to be successful, must be instituted before the vital forces of the patient are exhausted. This statement may at first sight seem to be too radical. The lesson, however, which the cases on record teach us, in my opinion, warrant this assertion, notwithstanding the fact that all the patients died, two with and two without operative interference.

The ordinary means—cathartics, enemata and stomach-washing, —have been faithfully tried and have utterly failed to give relief. The nature of the obstruction has led to the suggestion of antispasmodics. I do not think they can influence a contraction which persists under anesthesia, nor do I understand how we are to find

the indication for their use, as post-operative dynamic ileus cannot be diagnosticated.

It is of the greatest importance not to lose time with a method of treatment which, though giving temporary relief, is not curative. I refer to stomach-washing, and I fully agree with those who see in such temporary improvement a danger to the patient, as it is apt to deceive the surgeon. From my own experience, I must warn against lavage in the later course of the disease, as it decidedly hastens collapse.

The two patients treated surgically died; they were operated on too late. As we know nothing about the condition of the contracted portion of the bowel after operation, it is questionable whether a simple incision of the intestine will save the patient. As an emergency operation, a portion of the distended bowel should be sutured to the abdominal wound, incised and the intestinal contents removed. If necessary, a secondary operation may be done later.

2. Zeitschrift für Geburtshülfe und Gynækologie, Vol. XIV., p. 619.
3. Zeitschrift für Geburtshülfe und Gynækologie, Vol. XXXVI., p. 399.
4. Zeitschrift für Geburtshülfe und Gynækologie, Vol. XV., p. 37.
5. Transactions of the American Association of Obstetricians and Gynecologists, Vol. IX., p. 214.
6. Transactions of the American Association of Obstetricians and Gynecologists, Vol. VII., page 198.

118 Liberty Street.

TREATMENT OF TRIGEMINAL NEURALGIA (TIC DOULOUREUX), WITH REPORT OF A CASE SUCCESSFULLY TREATED WITH NITROGLYCERIN.

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.,
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AMONG the various forms of pain none baffle the skill and patience of the physician more than neuralgia of the fifth or trigeminal nerve, commonly called tic douloureux. So obstinate has this affection been that surgical intervention has, in many cases, been resorted to with a hope of allaying and stilling the excruciating paroxysms of pain. Neurectomy for many years was performed with varying success, but generally unfavorably, until the entire removal or destruction of the Gasserian ganglion was proposed and, in recent years, successfully carried out. Stretching of the nerve by Hueter's method was also in vogue at one time, but the beneficial results were only temporary and in a short time the

usual paroxysms reappeared. Of the surgical procedures this last one was the simplest and the results equally so, while the neurectomy of the branches of the trigeminus, at their point of exit, gave a longer respite from pain and in many cases complete recovery followed. Thus, Tansini[1] reports a case of severe trigeminal neuralgia, where neurectomy of the nerve was performed at the supraorbital, infraorbital and mental foramina, followed by the application of the actual cautery to the central stump, which was completely successful. In two other cases the same procedure was also followed with success.

Transection of the nerve is not sufficient in these cases, as regeneration of the nerve elements rapidly takes place and with it the recurrence of the paroxysms. Either a considerable portion of the nerve must be excised or the central end of the nerve treated with the actual cautery. But even if these precautions have been taken it is not safe to assert that the paroxysms will not reappear. Gilles de la Tourette, from an abundance of material at the Salpêtrière, Paris, claims that in this disease neurotomy never gives lasting success. Dana[2] likewise draws attention to this procedure as a failure in affording permanent relief.

The latest and most difficult procedure is the removal or breaking up of the Gasserian ganglion. The difficulties met with, the severity of the operation and the results are very well illustrated by the summaries of Keen's cases,[3] which were operated upon under the most auspicious surroundings, as regards asepsis, method and operator.

Case I.—Breaking up of the Gasserian ganglion after thirteen prior operations. Done in two stages on account of packing to arrest the hemorrhage; recovery; cure for twenty-six months, possible slight return. (?)

Case II.—Breaking up of the Gasserian ganglion, in two stages, after eight prior operations. Recovery; cure for eighteen months; possible slight return.

Case III.—Breaking up of the Gasserian ganglion after two prior operations; rupture of the middle meningeal at the foramen spinosum; infection during operation; death from septic meningitis.

Case IV.—Breaking up of the Gasserian ganglion after five prior operations; done in two stages on account of hemorrhage; packing with gauze for three days; recovery; cure for seven months; necrosis of the bone in the flap.

CASE V.—Curetting of the Gasserian ganglion after two prior operations. Rupture of the middle meningeal at the foramen spinosum. Post-operative corneal ulcer; recovery; cure for two months.

CASE VI.—Removal of the entire Gasserian ganglion with its second and third sections and its sensory and motor seats back to the pons in a piece four centimeters long, after four prior operations; recovery: cure for three weeks; post-operative corneal ulcer.

Keen operated by the Krause-Hartley method, which is preferred over the Rose method on account of lesser mortality, more ready access to the ganglion and the facility with which it can be removed. In twenty-two cases done by the Rose method the mortality has been four, or eighteen per cent., while in fifty-one operations, done by the Krause-Hartley method, the mortality has been only five, or 9.8 per cent. Keen states that so far as he knows there have been only three recurrences after operation, one in Rose's practice and two in his own. If this is a true index of the results of the operation, it recompenses for all the trials and dangers that patient and operator pass through. The resection of Meckel's ganglion has also been done, especially by Guinard,[4] who reported three cases which had been free from pain for over two years.

No mention need be made here of those cases of paroxysms of the third division, due to disease of the antrum of Highmore or to carious teeth, as they generally improve rapidly after the irritating conditions are removed.

From a purely medical standpoint tic douloureux has conquered the *vis medicatrix* almost completely—only here and there a case where some form of treatment has been of any benefit. What has been of service in one case has been useless in another, and in the pure neuralgic (not irritative) condition, a score or more of drugs have been recommended for trial. The most attention has been paid to aconitine, but as the preparations of this drug are unstable, and therefore unreliable, a difficulty is at once encountered. Stillé, in his fourth edition, in speaking of neuralgia said that "in the treatment of this distressing affliction the benefits to be derived from aconite are unequivocal and precious." At the 1896 meeting of the Association of American Physicians, in discussing the treatment of trigeminal neuralgia, Janeway said it was very difficult to get reliable aconitine, but when a good article was used the results were often very good. Putnam, of Boston, said he had been moderately successful with aconitine, but was willing to try

the strychnia treatment as recommended by Dana. Hunsberger[5] reported in a paper before the Pennsylvania State Society, 1895, his results with aconitine in fifty-seven cases of neuralgia of various kinds and thinks it superior to any other remedy, even operation. One of these cases was neuralgia of the fifth nerve, in which he administered "1-200 grain of aconitine every two hours with no apparent effect until the second day, when the pains gradually subsided, and in a week's time, or rather six days' time, she was freer from pain than she had been for fifteen years. I continued the aconitine for two months. She has had paroxysms of pain at intervals since, but the exhibition of aconitine for a few days would always quiet the nerve storm."

In an editorial on the value of aconitine in facial neuralgia in *Therapeutic Gazette*, July 15, 1896, is mentioned the fact—which in all probability is overlooked by many physicians—that there are two forms of aconitine upon the market, one of which is *amorphous*, the other *crystalline*. The latter possesses greater usefulness in neuralgic conditions, and that known as Duquesnel's should always be preferred.

In speaking of the dosage, the editorial asserts that because of the uncertainty and impurity of many of the specimens which have been tried by many physicians, the dose of pure aconitine is as yet undecided. Thus it is stated that as much as two and one-half grains of so-called aconitine has been taken with impunity, and that on the other hand a fatal dose of poisoning has resulted from the administration of 1-128 grain. Furthermore than this, the United States Dispensatory asserts that 1-640 grain is probably the largest amount that ought to be administered. On the other hand it is commonly stated by a number of authors that the dose is 1-100 grain, while Dr. Hunsberger gave 1-200 grain every two hours.

The editorial concludes as follows:

> The general trend of professional opinion seems to be that owing to the powerful, poisonous influence of this alkaloid and the uncertainty of its dose, it is not justifiable to administer it internally. Personally, we would feel that if we did give it internally we would be running a considerable risk and, in the event of an accident, would be held responsible for any disagreeable results which might ensue.

If such is the judgment upon the use of aconitine, it is time that the use of the drug should be curtailed and given only in extreme cases and as a last resort.

Dana has recommended the hypodermatic injection of strychnia; the injections are made once a day and the dose gradually increased from 1-30 grain to 1-5 grain or ¼ grain, ten to twenty days being required to reach this maximum. He says the large doses sometimes have an immediate anodyne effect like that of morphia. Six cases were reported, two in women, four in men, and all were relieved but one. The period of relief in the five cases had been from one and one-half to two years.

The injection of cocaine into the arm has been advocated by Seagrave,[6] the effect being not so much local as general, probably through the vaso-motor influence. Gilles de la Tourette advises the administration of thebaic extract. The first day he gives two pills, each containing two centigrammes of the drug. The quantity is gradually increased until doses of twenty centigrammes are reached, and then gradually decreased to two centigrammes and then stopped entirely.

Local external applications have been of some service, especially the oleate of aconitine, which must be employed very carefully; also compresses wet with from fifteen drops to one dram of guiacol[7] applied over the painful spots for a very short time.

Quinine, iron, arsenic, and the fats, also the Brown-Sèquard shotgun pill, have all, in some cases, rendered fair service, but aside from their tonic virtues probably do not exert much influence as anti-neuralgics. They do form important adjuncts to treatment of whatever nature and must not be relegated to the rear as obsolete and antiquated.

Some of the synthetical compounds and the opiates are of great service in temporarily checking the pain, but their use is to be held in check as much as possible.

Having succeeded admirably with nitroglycerine in cases of sciatic neuralgia,[8] I determined to try this drug in tic douloureux and watch its effect in relieving pain.

I was called in consultation, in November, 1896, with Drs. Mynter and Redmond to see one of the cloistered nuns on Best street, who had been having for some time past an inveterate trigeminal neuralgia. It was thought probable that an operation would be more liable to give the desired relief, and the removal of the Gasserian ganglion was contemplated. The surgeon not wishing to operate until all medicinal agents had been carefully employed, delayed, until, at my suggestion, nitroglycerine had been thoroughly tested. I prescribed tablets of 1-100 grain of the drug,

at first three times daily and increasing until she was taking seven or eight tablets daily and if necessary one tablet every hour. The face was also treated with the mild galvanic current and a laxative tonic to improve her general condition. She began to improve after the second week and has steadily continued without interruption. The large doses of nitroglycerine did not affect her disagreeably and the head did not pulsate as is sometimes noted.

Tolerance to nitroglycerine is easily acquired by some patients. Thus Stewart[9] reports a case of chronic nephritis where six months after the initial dose, the patient was taking fifty minims of a ten per cent. solution (five minims of pure nitroglycerine), four times daily, with less effect on the vascular tension than the initial dose of 1-100 grain.

Reading[10] narrates the case of a woman, 57 years old, suffering with chronic interstitial nephritis, who, less than one year after the initial dose of nitroglycerine, was taking one teaspoonful of the ten per cent. solution at each dose, this being equal to six grains of the pure drug.

The dose of my patient compared to these two is insignificant, and the moral to be drawn is to increase the dose until the physiological effects are produced, even if enormous doses must be administered.

Aside from its anti-neuralgic qualities it is a tonic, and it is reported that girls working in nitroglycerine factories become plump and rosy and are the pictures of health.

1. British Medical Journal, March 16, 1895.
2. Medical Record, May 9, 1896.
3. American Journal of the Medical Sciences, January, 1896.
4. Gazette des Hôpitaux, 1895, p. 1251.
5. Therapeutic Gazette, August 15, 1895, p. 510.
6. British Medical Journal, February 8, 1896.
7. Ferraud, Ind. Med. Chir. Rev., March, 1896.
8. New York Medical Journal, February 29, 1896.
9. Therapeutic Gazette, September 15, 1893.
10. Therapeutic Gazette, May 15, 1893, p. 292.

371 Delaware Avenue.

Dr. Willis F. Westmoreland, professor of surgery in the Atlanta Medical College, is authority for the statement that Dr. Warren's declaration (in his text-book of Surgical pathology, 1895,) that "carcinoma does not occur in the negro" is wholly incorrect. He has seen at least a half dozen cases in the last two years. There can, however, be no question that the disease is far less frequent in the African than in the Caucasian race.—*Am. Jour. Surg. and Gynec.*

PLACENTA PREVIA, WITH SPECIAL REFERENCE TO TREATMENT.[1]

By W. H. WENNING, M. D., Cincinnati, Ohio,

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A FEW years ago I had the honor to present to this association an essay entitled A study of the pathology of placenta previa. Within it were set forth the various theories advanced up to that time on the etiology and interpretation of clinical symptoms in this most interesting anomaly of pregnancy. Its intimate connection with the doctrine of expansion of the lower segment of the uterus and retraction, as well as contraction, of the upper segment of the uterus, was discussed and an endeavor made to harmonise the various conflicting theories in reference to the anatomical position of the inner os during labor in its bearing upon the development of the previal placenta. The length of the paper precluded the more practical consideration of the treatment of this accident. A regret was then expressed by several members that I had not entered into this subject in its therapeutical aspects, which I accordingly briefly reviewed in the interesting discussion that followed the reading of my paper.

On this occasion, therefore, I have taken the liberty to recur to this subject, not so much with the intention of presenting any new and startling contribution, as to simply review (1) some of the means at our disposal for arresting the hemorrhage, the cardinal symptom of placenta previa and (2) the methods of expediting labor, which is almost always imperative in the interest of the lives of both mother and child.

In no other condition of pregnancy is the danger to life so imminent, in no other is a knowledge of the proper methods for averting this danger so essential, and in no other is a judicious discrimination as to the relative value of each of the several procedures so necessary as in placenta previa.

An affection in which the maternal mortality has been at various times computed as ranging from 25 to 50 per cent. and the fetal from 50 to 75 per cent. certainly merits our closest attention.

Fortunately for womankind, this fearful death-rate has been greatly lessened within the last few decades, thanks to improved methods of treatment and earlier recognition of this condition,

1. Read before the tenth meeting of the American Association of Obstetricians and Gynecologists, at Niagara Falls, August 19, 1897, and published in the *American Journal of Obstetrics.*

even if no very great strides forward have been made in the saving of infant lives.

Unfortunately, however, even at the present time this decreased mortality has not been so general as it should have been and it is only from well-conducted institutions, under skilful management, that successful results of a marked character have been obtained. The maternal mortality in a number of recorded cases has been decreased to the encouraging figure of from 4.50 to 7 per cent., yet the general fatality in unselected cases still reaches the high figure of from 25 to 33 per cent.

When we examine into the cause of this great difference we must, of course, make allowance for the different degrees of placenta previa, which, in many instances, may have been recognised only in the fatal cases, but certainly much better results should have been obtained in general practice if two absolute rules could be more generally inculcated—namely, (1) timely intervention and (2) a proper judgment of the means applicable to the case in question.

The relative merits and demerits of this or that method have time and again been reiterated, so that the conclusion naturally forces itself upon us that every procedure has its advantages or disadvantages and that no particular treatment is applicable to each and every case. This will also explain the fallacy of statistics, which perhaps are nowhere so unreliable when made conformable to a certain mode of action, as in placenta previa.

To illustrate I will briefly summarise the methods of treatment resorted to by fifty American writers in the same number of cases reported in the last five years, almost uniformly with a good result —at least for the mothers. Three depended solely on expectant treatment; three used the tampon alone, one with rupture of the membranes; three punctured the membranes; four instituted bipolar version; three ordinary version; four adopted Barnes's method of dilating the cervix, four resorted to this method and followed it by version; two by the use of the forceps, and two by version and forceps applied to the aftercoming head. In fifteen instances recourse was had to accouchement forcé—namely, manual dilatation of the cervix followed by version. In three instances separation of the placenta was practised and in two instances Cesarean section was made. Of this number only two deaths are recorded—one after the use of the tampon, the other following Cesarean section.

This collection, taken at random, simply proves that all methods may be followed by good results and that no fixed rule can be

established for every case. It is remarkable, however, that notwithstanding the excellent results achieved after the rehabilitation of the Braxton Hicks method of bipolar version only four cases are reported as having been treated in this manner, whilst the much-condemned procedure known as accouchement forcé, viz., manual dilatation followed by version, is mentioned as often as fifteen times, and that among these last cases we find some of the best and most eminent teachers of our land.

Discarding the more antiquated forms of treatment, which by common consent have fallen into disuse, we will confine ourselves to a discussion of three of the methods most commonly employed. These are (1) the tampon, (2) rupture of the membranes and (3) version. Each of these means may be used by itself, or, which is more frequent, in combination with one or two of the others. It is my purpose to show that each method of procedure has its specific indications and that it is not just either to extol one or condemn the other, to the exclusion of the rest. It is the knowledge of the applicability of a specific treatment in a given case and a nice discrimination among the various methods that will give the best results.

While not wishing to appear dogmatic and admitting that there may be some exceptions to the following rule, I would make the broad statement that the tampon is applicable only before dilatation of the os, rupture of the membranes after the onset of labor pains, and version after sufficient dilatation or dilatability of the cervix.

It is the nonobservance of this principle that, in my estimation, is responsible for the fearful mortality that has followed each of these methods when employed injudiciously, that is, at the wrong period; and to the observance of this principle that the excellent results are attributable after judicious use of each of these three methods.

It is just as irrational to use the vaginal tampon when the os is sufficiently dilated for delivery, either spontaneous or artificial, as it would be to attempt version with a closed or rigid os. As a rule it is as improper to puncture the membranes before labor has sufficiently advanced to permit the presenting part or head to engage in the cervix and thus arrest bleeding, as it is to wait for a spontaneous rupture of the membranes when bleeding occurs from a well-dilated or dilatable os, readily permitting manual interference.

Then again, each method is subject to its modifications and such questions as the following may present themselves: When shall we use the vaginal and when the cervical tampon? Shall we rupture the membranes as soon as the os is permeable to two fingers for the performance of bipolar version, or shall we wait until the hand can be gradually introduced for ordinary podalic version? When shall we resort to Braxton Hicks's method and when to internal version?

Whilst one or two of these methods may be elective, there are proper indications for each which may now be considered in detail.

THE TAMPON.

The vaginal tampon is simply a preparatory measure. It serves to arrest bleeding until the time comes for active interference. Its office begins with the onset of hemorrhage and ceases with dilatation of the os. It serves a double purpose in that, when properly applied, it checks bleeding and assists in bringing on labor. As both are accomplished by pressure, it is necessary that the tampon be at the same time large and firm. This property of inducing labor, which often contraindicates the tampon in abortion, serves a good purpose in placenta previa, for it is positively proven that no woman who has hemorrhage of such an alarming extent as to require active measures for arrest in placenta previa is safe until she is delivered. The indication of labor, to my mind, is imperative with the first onset of copious hemorrhage. What is more reasonable, therefore, than to check the latter and expedite the former? The tampon fulfills both indications. By its means we gain time for further manipulations, and at the same time maintain the strength of the patient.

The opponents of the vaginal tampon offer the following objections: (1) It does not check hemorrhage; (2) it is apt to produce sepsis.

The first objection is, I fear, too often well-grounded. In most instances, however, it is undoubtedly due to the form of the tampon. If constructed as is customary for abortions and ordinary tamponment of the vagina, it is worse than useless, for it gives rise to a false sense of security. In a number of consultations in which I have been called, I have not once seen the tampon employed *secundum artem*. No wonder, then, if the tampon should fall into disrepute. Unless the vagina be completely packed throughout the length and breadth of this cavity, "from dome to pit," can it offer any safeguard against hemorrhage? If such older obstetricians

as Leroux and Wiegand have had excellent results, it is because of the thorough method which they employed. The relaxed condition of the vagina entails with it a capacity which is simply enormous. It is immaterial whether cotton or gauze be used for that purpose, provided the quantity be only sufficient: "a hatful" of cotton balls, as Pajot says, or 1,500 grams of gauze, as Aubard claims, being required for that purpose. My own preference is for iodoform or sterilised gauze, as it is more convenient both for introduction and removal. By its means the cavity can be rapidly filled, a matter of great importance when time is so valuable. The patient should be placed in Sims's position, in order to invoke the aid of atmospheric pressure in distending the cavity. A large Sims or other retractor is introduced and a roll of gauze, about three fingers in width, may be rapidly passed into the vagina. If possible, the cervix should first be packed and then the whole vaginal cavity tightly packed. Although usually a Sims retractor is employed for that purpose, I prefer a Neugebauer speculum, which I use for all tamponing in private practice, as its open end is particularly well adapted for this purpose; it is self-retaining when used with its fellow and is perfectly aseptic. Its simplicity and special adaptability are its most commendable features. I may be pardoned for calling attention to this rather elementary subject, but as I am speaking more for the general practitioner, upon whom this duty will first devolve than the specialist, I desire to facilitate this maneuver as much as possible. This retractor has the further advantage of not in the least displacing the solid plug when the instrument is withdrawn at the end of the operation.

It cannot be denied, however, that even with the greatest precautions we may fail occasionally of accomplishing our purpose. In some instances the blood will sicker through or alongside of the tampon, but more frequently the retraction of the uterus will draw the cervix away from the tampon and blood will be effused between these two surfaces. Internal hemorrhage is not likely to occur, as the intrauterine pressure of the fetus and tense bag of waters will exert sufficient pressure against the cervix in the early stage of labor, the only time when the vaginal plug is admissible. At any rate, constant watchfulness and observation are necessary, and *under no circumstances should a physician leave his patient from this time onward until the end of labor.*

How long should the tampon remain? As long as there is no external or constitutional evidence of hemorrhage. If no bleeding

occurs it is not necessary to remove it at the end of one hour, as Barnes would have it, but neither is it safe to wait for its expulsion by the natural labor pains as Pajot advises. It should be removed at the end of about twelve hours, unless circumstances demand an earlier removal.

The danger of sepsis is averted by the known rules of asepsis and antisepsis in cleansing the genital tract and the use of surgically clean material. The blood itself is an excellent antiseptic, and if care be taken against the introduction of any contaminated object the risk of sepsis is indeed very slight.

The vaginal tampon when properly applied is therefore indicated in the following conditions: (1) marked hemorrhage in pregnancy, (2) moderate or profuse hemorrhage in the beginning of labor, and (3) when the patient can be kept under strict supervision.

When the os is sufficiently dilated for the introduction of a cervical tampon, this should be resorted to. Sponge tents, tupelo or seatangle tents, although still advocated by some, have justly been discarded on account of the danger of infection in the first instance and the liability to slip out of neck of the womb in the latter case. Preferable are the various forms of rubber appliances, as Barnes's bags, Braun's colpeurynter (originally, however, intended for the vagina, as its name implies); or the several French appliances devised by Tarnier, Chassagny, Champetier de Ribes and others. Of these, Barnes's bags are undoubtedly most ingenious, and theoretically well adapted. Practically, however, they frequently fail, for the following reasons: difficulty of introduction, a tendency to slip out notwithstanding their constricted shape, and, lastly, the necessity of early removal for the introduction of a larger size. Notwithstanding that these disadvantages have been somewhat obviated by the modifications of Cowan, Fehling, McLean and the like, they have never become very popular.

The most serious objection is, however, that they do not always sufficiently tampon the cervix to prevent leakage, as shown in the following case:

Some years ago I was summoned to a case of placenta previa by a medical friend who had endeavored for several days to check hemorrhage with the ordinary vaginal tampon. On examination I found the os sufficiently dilated for combined version. He preferred, however, the continued use of the tampon, and as a compromise I suggested

Barnes's cervical tampon. I accordingly introduced the largest size that would enter the cervix, and, when it was well filled, satisfied myself that the cervix embraced the bag tightly; not a drop apparently could leak out. As I had been called to attend another case of hemorrhage, I left the case in his charge until I could return. Unfortunately, he, too, left the patient soon after, and on my return, half an hour later, I found the patient almost exsanguinated for the loss of blood. The bag had slipped into the vagina, and I was forced to introduce my hand as far as possible to check the terrible bleeding that was taking place. With the greatest difficulty I delivered the patient by version, or accouchement forcé, before the bleeding could be stopped. Unfortunately, septicemia set in, and six weeks later the woman died with a phlegmasia alba dolens.

This case well illustrates the improper use of the tampon in the beginning, the unreliability even of cervical tamponing in advancing labor and the necessity for constant vigilance.

Over this intracervical tampon of Barnes, the supracervical bags of Tarnier, Champetier de Ribes and the like, are a decided improvement.

Braun's colpeurynter (in this instance more properly called metreurynter) has also been used by Schauta and the Vienna school for tamponing the cervix. Of all these appliances, Champetier de Ribes's bag seems to me the most efficient; it is fast finding favor, not alone with French, but also with German and English obstetricians. The conical shape of this bag adapts it most perfectly for controlling hemorrhage by pressure on the cervical portion of the lower uterine segment and also prevents its expulsion until the cervix is large enough to be followed by the advancing head or permit the introduction of the hand. Its hydrostatic pressure exactly imitates nature by opening the cervix from above downward. A further advantage is its inelasticity, by which it exerts a stronger pressure upon the surrounding tissues than Braun's colpeurynter or Tarnier's intrauterine balloon. It can be introduced when the os is dilated to two fingers' breadth. Consequently it enters into direct competition with Braxton Hicks's method of combined or bipolar version. It has the advantage over this latter procedure that it is easier of execution, requires no assistant for anesthesia and takes less time than combined version. It closely follows the method and principle of vaginal tamponment and is, therefore, more readily learned. The shape of the bag at once reminds one of the breech and thigh of the child, acting in this manner similarly to the extended limb, as is recommended in the final stage of

Braxton Hicks's method of version. It performs the same office without disturbing the axis of the child. Its disadvantages are said to be the danger of producing sepsis and the tendency to displace the presenting part and thus preventing the head from engaging in the cervix. The former can be obviated by chemical antisepsis and should not be attended with greater danger than the introduction of the hand in version. The second objection is also not tenable, for either the head may be pushed into the lower part of the uterus or the hand introduced and the delivery concluded by version. At any rate, transverse presentations are very frequent in placenta previa; even if the presentation be vertical and should the head be pushed aside, the very act is accomplished which is the first step in bipolar version.

A perusal of recent German literature, notably the reports of the proceedings of the last meeting of the German Gynecological Society at Leipsic,[2] show that such ardent supporters of the Braxton Hicks method as Hofmeier, Schatz, Kuestner and others admit the advantages of the cervical tampon and look upon it with much greater favor than vaginal tamponment.

RUPTURE OF THE MEMBRANES.

Contrary to the accepted rule in normal obstetrical cases—to preserve the membranes until full dilatation of the os has occurred—early rupture of the bag of waters for the purpose of precipitating uterine contractions and thereby arrest hemorrhage by fetal pressure, has been very urgently advised by several eminent authorities; other equally experienced obstetricians have as stoutly disapproved of this procedure until delivery could be readily effected through a dilated or dilatable cervix. Thus Barnes says, "the puncture of the membranes is the first thing to be done in all cases of flooding before labor sufficient to cause anxiety. *It is the most generally efficacious remedy and it can always be applied.* It is sometimes sufficient in itself; it does not materially interfere with the resort to further steps."[3]

Schröder, although an advocate of the use of the tampon in the beginning, likewise advises early rupture of the membranes. He significantly adds, "there are no contraindications."[4] He lays down the following rule of treatment: "Rupture the membranes, bring down one foot, but wait with extraction."[5]

This doctrine is, however, not adhered to by all his pupils, for Veit observes: "Although rupture of the membranes may be theoretically correct, I would recommend it in practice only when,

with a slight previal placenta, the os is well dilated and the size of the child will enable its immediate engagement. In doubtful cases combined version should always be preferred, but sight must not be lost of the fact that with the loss of the waters combined version becomes very difficult; we should not attempt rupture of the membranes and then, when the hemorrhage ceases, resort to combined version."[6] Later on he says: "Rupture of the membranes alone suffices in those cases in which the os in a vertex presentation is considerably dilated and the head enters upon it."[7]

In other respects he is a firm supporter of Braxton Hicks's bipolar version.

Spiegelberg, the most pronounced apostle of accouchement forcé, after stating his objections to the method of bipolar version, that it is not always easy of execution and that it does not arrest hemorrhage, continues: "For the same reason rupture of the membranes with presentation of the vertex is in general not advisable. Experience teaches that this method is followed by a good result only in those cases in which there are labor pains and the head is soon forced into the inlet. Unfortunately, in placenta previa good pains are often wanting and rupture of the membranes must often be followed by version, now performed under more unfavorable circumstances than if it had been done at once. Better, therefore, do the whole thing."[8]

It will be seen from these quotations that the propositions are diametrically opposed to each other. The advocates of early puncture aim to excite labor pains by evacuating the liquor amnii; the opponents claim that good pains and a well-dilated os alone justify this procedure.

In my judgment both views are extreme. It should always be our endeavor to imitate nature as much as possible, even in so anomalous a condition as placenta previa. We should first try to check hemorrhage by means of the vaginal tampon, then by the cervical plug, always, if possible, preserving the membranes until rupture, either spontaneous or artificial, can be followed by rapid delivery. Moreover, early rupture, in a certain measure, impedes bipolar version, for this operation is much more difficult to perform with the waters lost than with the membranes intact. It will be observed that advocates of early rupture are at the same time the partisans of combined version. They impede their own work. It also lessens the chance for the deflected head or breech to enter into the cervix.

On the other hand, when hemorrhage continues unabated and, in spite of good vaginal tamponing a reasonable time, labor pains do not set in, it may become necessary, in the interest of the mother, to disregard all rules and hasten delivery, not for the purpose of exciting pains, but to terminate labor as rapidly as possible, if need be, by accouchement forcé. Complete (or as it is generally, though not always correctly, called central) placenta previa will require this early puncture of the membranes more frequently than the incomplete or lateral variety, as the hemorrhage is more profuse and necessitates rapid delivery without awaiting the onset of natural pains.

As a rule, therefore, the membranes should be ruptured early in labor; (1) when hemorrhage is profuse and cannot be checked by tamponing; and (2) when pains are absent and it is evident that evacuation of the liquor amnii will stimulate the uterus to contraction. It is indicated late in labor; (1) when the os is sufficiently dilated that either spontaneous delivery will soon follow; or (2) manual or instrumental delivery can safely be resorted to.

VERSION.

Much on this subject has already been said in the discussion of the two preceding methods of procedure. It is undoubtedly the most important and most commonly practised method of hastening delivery in placenta previa. The breech and thigh of the child arrested in the cervix act as a tampon and gives us an excellent means of checking hemorrhage before extraction of the child really has taken place. No one will dispute its efficiency. The only question at issue is, can it be resorted to sufficiently early to act as a tampon and at the same time expedite delivery without danger to mother and child? or should it be resorted to only in those cases in which other methods have already been tried which proved unavailing and rapid extraction becomes imperative?

The *time* of performance is here an important element. At an early date no other method of version than that known as bipolar version is safe and practicable, at a latter date direct or internal version is not only possible, but much more easy of execution.

(*a*) Braxton Hicks has undoubtedly conferred a great boon upon the obstetricians of the whole world and through them upon suffering womankind, when he devised his now so widely and favorably known method of combined internal and external, or bipolar version. He has given us a method by which we can relieve women of imminent danger of death long before any other

means are at our service. For no other condition in obstetric practice has this been a greater blessing than just in placenta previa. As stated in the early part of this essay, many, nay almost all, of our good results in lessening maternal mortality have been due to the skilful use of, and timely resort to combined version. It is but recently, however, that its beneficent results have been made manifest, when the Berlin school, under the guidance of Schröder, and followed by Hofmeier, Behm, Wyder and Lomer, obtained such brilliant results. To them belongs the credit of having brought this method more prominently again before the world and for having endeavored to introduce it more generally into practice. Without wishing to detract one iota from their merits, I may be pardoned for expressing a doubt whether such excellent results will ever be obtained outside of well-regulated lying-in institutions, where skilled operators and assistants, careful supervision and early observation, go hand in hand together. This combination is not apt to be found in general practice, where the merest tyro may suddenly be brought in confrontation with a desperate case, alone without assistance, and at a time when every moment is precious.

Let us briefly review under what circumstances we are advised to resort to combined or bipolar version. Barnes, Schröder, Veit and others all say: as soon as two fingers can be inserted into the os, no matter what period of pregnancy or stage of labor. In theory this is correct, but is it always possible to make any impression on the presenting part when the fetus is still so high in the pelvis? It is true that rupture of the membranes may bring on labor pains and thus force the body of the child sufficiently downward to be reached by the examining finger. But we have already seen that this loss of fluid materially impedes the rotation of the child, which must be done with ease to render the method effective. We have already stated that rupture of the membranes, unless immediately by combined version, is really a contraindication against its performance.

It is true we are told that the hand must be introduced entirely into the vagina, so that the extended finger or fingers may penetrate the long cervix.[9] But who can do this at so early a stage of labor without inflicting great pain upon the patient, not to speak of the impossibility of forcing the whole hand into the vagina?

We are again told that the patient must be thoroughly anesthetised, when it will be easy to execute all the maneuvers necessary for this operation. True, but this requires competent assistance,

thorough obstetrical knowledge, both in diagnosis and treatment and such other favorable surroundings, not always obtainable in ordinary practice. Where the combination above mentioned is at hand, the results that have been attained are sufficient proof for the excellence of the method.

The reproof that infantile mortality has not been lessened, nay perhaps even increased, is to my mind no valid objection, as the life of a mother is paramount to that of a number of children, and where the maternal loss of life is one-tenth to one-fifth of that of former statistical results, no further argument is needed. It must be added, however, that the primary object aimed at—namely, cessation of hemorrhage, is not always obtained, as proven by a number of observers, among others by Runge in a well-illustrated and remarkable case.[10]

The question of slow extraction, or leaving expulsion of the child to nature, need not be discussed at any length. It is now almost the common opinion that slow extraction does not imperil the integrity of the cervix, but facilitates labor and more securely checks hemorrhage.

Finally, then, under the limitations above mentioned, we can strongly recommend this method, but should as urgently warn against it as a hazardous attempt when it cannot be readily completed, adding to the difficulties already encountered, unless skilfully executed. Under these circumstances the cervical tampon, as already described, is a less difficult and less complicated procedure.

Attention has already been called to the similarity in shape and action of Champetier de Ribes's bag and the ham of the fetus. One advantage for the latter, however, in the completion of the act of combined version is that the leg of the child offers us a means of delivery at the same time that it acts as a natural tampon, whereas the expulsion or extraction of Champetier's bag does not yet conclude labor, but must be followed by version, or, in favorable cases, by the use of the forceps, unless the head of the child immediately engages in the cervix and takes the place of the artificial tampon that preceded it.

(*b*) Internal version, by which we mean ordinary podalic version, is the oldest and best known method of terminating labor in placenta previa when the os is large enough to admit the hand.

When proper precautions against hemorrhage have been taken in the earlier or dilating period and danger has been successfully

averted until the os has become dilated—or at least dilatable—podalic version is the most practical, direct and effective mode of delivery and, during the performance of the act, of checking the bleeding. The hand and arm of the operator first compress the bleeding surface; then, when the foot and, following it, the leg and thigh are brought down, this hemostatic pressure is continued, just as in the final stages of Braxton Hicks's method of bipolar version. There can be no objection to this method when the circumstances are as favorable as in the instance just mentioned. But a more important question is, shall we resort to direct version at an earlier stage of labor, before the os is sufficiently dilated or dilatable for the introduction of the hand? To accomplish its purpose, the hand must force its way through a rigid and, as yet, undilated os and unrelentingly continue its pressure until it wedges its way into the uterine cavity, seizes the foot and rapidly brings it down. This is what is literally meant by accouchement forcé, or forced delivery. However, this definition has been somewhat modified and the term has been sometimes applied to a method of procedure much less brusque than might at first sight appear.

The question of propriety or impropriety of this operation will be measured entirely by the degree of force to be used and this again will be determined by the period of its attempt. The term will, therefore, admit of a very wide interpretation and will always require a qualifying explanation. When, therefore, cases are recorded as having been delivered in this manner a description of the permeability of the os is always in order, to determine whether the method was applicable in the given case or not. It is with this understanding that I proceed to express either my approval or disapproval when I at one time extol and then again condemn this method.

Early in labor, when the os is firm and unyielding, when a forcible dilatation would be apt to be attended with laceration of the cervix and possibly gangrene, when other safer means are at hand to check the bleeding and at the same time aid the natural course of labor to such a point when artificial means can be resorted to without injury to the parts, accouchement forcé is certainly to be condemned. The only justification for such a course lies in such a state of affairs that no time is to be lost, when the bleeding is so enormous and uncontrollable that the patient is sure to die unless rapidly delivered. Here the question hinges upon the point

whether the woman shall be allowed to die undelivered or be given the (it may be) slender chance of recovery by forced delivery.

When, however, the cervix is not very rigid and gradually yields to the manual dilatation effected by one finger following the other until the whole hand can be introduced and then version cautiously but unhesitatingly performed, this method claims advantages over any of the others.

In the first place, if the cervix is soft but not friable, the fingers and hand form the best dilator and intracervical tampon. The fingers compress the bleeding surface and as more and more of the placental surface is demanded, either by the retraction of the womb or the separation of the placenta, the conical hand follows it, continually checking the hemorrhage, until the whole hand is in the cavity of the uterus, the forearm still continuing this pressure and occluding the os until the process is reversed by the withdrawal of the hand in the process of extraction, when the child's limb takes the place of the operator's arm. Under favorable circumstances it takes less time than any of the other procedures before mentioned, but can only come into execution when labor has progressed some considerable time. With the exception of the early tampon, it may supersede all other measures and safely terminate a desperate case that would baffle all other means.

The majority of cases in consultation that I have seen, I have delivered in this manner and, I am happy to state, with but one death and that was not due to the method, but other circumstances. In all of these labor had proceeded to such a degree, although the loss of blood had been previously very copious, that I could at once check further bleeding and rapidly and safely terminate labor. In two or three desperate cases I thus effectually tamponed the cervix until the patient could be placed under an anesthetic, and through a relaxing os I could then penetrate into the uterus without the slightest injury to the cervix.

Although there are exceptions, the cervix in placenta previa is more soft and dilatable than in ordinary conditions—it is true, frequently also exceedingly friable, requiring extreme caution in the manipulation. This by no means new method is fast finding favor with very eminent authorities and, as may be seen from the list mentioned in the beginning of this paper, is more frequently practised than any other one method. When speaking of accouchement forcé as a safe procedure, the initial manual dilatation should always be understood.

No reference has been made, so far, to separation of the placenta as a distinct method of treatment. The idea that total separation of the placenta would arrest the bleeding was based upon the erroneous theory that the placenta was the sole source of hemorrhage. This practice of Simpson and Radford has, therefore, fallen into disuse, although cases might occur in which such a course would be necessary when it would be impossible to reach the fetus for the purpose of delivery by any other means. Then it becomes necessary to follow immediately with extraction of the child, which would otherwise surely die of asphyxia and also to compress the bleeding maternal placental site in the interest of the mother.

The following case, in which this was unintentionally practised, shows the possibilities and indications of this procedure:

A few months ago I was summoned in the evening to attend a case which was reported to be one of miscarriage. The young woman was little over twenty years of age and, according to the statements of her husband, had three abortions in rapid succession and one labor at term: the child died soon after delivery. I was told that in this impending miscarriage she was in attendance by a physician, a friend of mine, who had seen the case in the morning but could not be found in the evening. The hemorrhage had been slight all day, but had become much more profuse in the evening and hence the alarm. I communicated with the attending physician (who had returned to his residence by this time) and was requested by him to visit the case for him that night and he would see it in the morning.

On my arrival at the house I found that there had been considerable hemorrhage and I prepared to tampon as for abortion. After the vagina had been plugged with iodoform gauze I found that the blood continued to oose and that the patient showed signs of syncope. I at once removed the tampon, passed my hand into the cervix and found it covered by placental tissue. As the bleeding now was becoming very profuse, I attempted to rupture the membranes, but found that I could nowhere reach the membranes, the case being one of complete placenta previa. I then endeavored to pierce the placenta through its substance with my finger, in the hope of making bipolar version. I could not succeed with this, as the placenta seemed to yield to my finger and was simply pushed up higher into the uterus, the bleeding becoming still more profuse, notwithstanding that I was making firm counterpressure upon the uterus. I found, however, that this pressure, when I withdrew my finger, momentarily checked the bleeding, and as the patient was very unruly and begged me not to proceed any further, I took advantage of this temporary respite and sent for assistance, in the meantime maintaining

the position of my hands in the attitude of internal and external pressure. When my assistant arrived I had him anesthetise the woman so that I could penetrate higher upwards into the cavity of the uterus through the thick placenta. Suddenly, to my great surprise, after a hard expulsive pain, the whole placenta was thrust into my hand by the uterus, and I delivered it *en masse*. By this time the cervix was sufficiently dilated so that I could gradually introduce my hand and in a few minutes extracted the child by podalic version. The child was alive, of about six months' gestation, but died about one hour after delivery. The mother made an uninterrupted recovery without the slightest evidence of post-partum hemorrhage or rise in pulse and temperature. The cervix had not been torn in the least, and with the exception of an old laceration which had occurred in the first delivery and undoubtedly was the cause of the subsequent abortions, there was nothing abnormal in appearance. At a later time I curetted the uterus and repaired the laceration with apparent perfect restoration of the organ to its normal condition.

A somewhat similar case has been recently reported by Charles A. Whitney.[11] A multipara was suddenly seized with labor pains attended with great hemorrhage. During one of these pains the whole placenta (which had also been central) was expelled and hemorrhage ceased. As the labor pains had also ceased and the patient was much exhausted, restoratives were applied and later the child was extracted. This woman also made a good recovery.

The other methods of separating the placenta, as proposed by Barnes, Cohen, Murphy and others, chiefly applicable to lateral implantations, are, under certain conditions, valuable as auxiliary measures. They certainly cannot be regarded as a mode of treatment *per se*, for clinical experience has proven sufficiently that the hemorrhage frequently continues unabated in spite of the detachment.

For the purpose of converting a central into a lateral implantation, pushing the placenta aside in order to reach the membranes or to allow the head to descend into the os, this method in conjunction with the others previously mentioned, may often serve a useful purpose if the anatomical relations of the placenta to the cervix have been previously well studied.

Before concluding this chapter it might be of interest to describe a novel procedure by Nyhoff,[12] of Amsterdam, in the treatment of placenta previa centralis. After having made the observation that the amnion is but loosely attached to the placenta and in order to prevent the placenta from being drawn away during the process of

retraction of the uterus, he proposes to pierce the placenta, strip off the amnion during the dilating period and thus enable it to follow the changes in the uterine walls. During a pain the amniotic sac bulges into the rent of the placenta, which is gradually widened until the child is born spontaneously. If the amnion is, however, very friable or too firmly adherent, he prefers delivery by the combined method with extraction of the leg. He claims for it the following advantages: (1) it does not interfere with the natural progress of labor as do rupture of the membranes and combined version; (2) it may be combined with aseptic tamponing; (3) no anesthetic is necessary; (4) it removes the temptation of rapid extraction; and hence (5) prevents cervical lacerations.

It is indicated in placenta previa centralis when the os permits the introduction of two fingers and the pains are not weak. It is contraindicated in placenta previa lateralis and when pains are absent.

SUMMARY.

The tampon is indicated—(1) In hemorrhage towards the end of pregnancy; (2) in the beginning of labor when os is closed; (3) in moderate dilatation of the cervix—then use cervical tampon.

Contraindicated—(1) When dilatation is complete or nearly complete; (2) when it fails to arrest hemorrhage even when dilatation is not far advanced.

Rupture of the membranes indicated—(1) When os is well dilated and either spontaneous labor or artificial delivery may occur; (2) when by this method hemorrhage is better controlled than by other means; (3) when in the absence of labor pains it will be followed by immediate pressure of the presenting part.

Contraindicated—(1) When os is undilated and pains good; (2) in faulty presentation of the fetus, unless it can be followed immediately by version.

Version is indicated—(1) When the os will admit two fingers and combined version can readily be made—Braxton Hicks's method; (2) when the os is well dilated or dilatable and hemorrhage is profuse—direct or internal version; (3) in desperate cases—accouchement forcé.

Contraindicated—(1) When with a moderately dilated os combined version cannot be skilfully made (the cervical tampon); (2) when with a well-dilated os, after rupture of the membranes, the head immediately engages in the cervix.

In all cases strict supervision from the onset of labor to the end of delivery.

To summarise, the following should be the treatment in the order of time in placenta previa, depending on the amount of hemorrhage and condition of the patient:

(*a*) *Before labor*—(1) Hemorrhage slight, expectant treatment; (2) hemorrhage moderate, vaginal tampon; (3) hemorrhage profuse, also try tampon and then induce labor.

(*b*) *In the beginning of labor*—(1) Hemorrhage moderate, first tampon vagina until dilatation sufficient for the introduction of the cervical bag, or, if skilled assistance be at hand, Braxton Hicks's method of bipolar version; (2) hemorrhage profuse, first cervical tampon; if not successful, gradual manual dilatation of os until

(*c*) *Labor is well in progress*—Then rupture membranes and deliver by podalic version, or if hemorrhage is arrested by the descending head, apply forceps, or if pains be good, permit spontaneous expulsion.

2. VII. Congress d. Deutschen Gesellschaft f. Gynækologie in Leipzig, 1897. Ref. Monatsch. f. Gynæk., July, 1897.
3. System of Obstetric Medicine and Surgery, p. 584.
4. Lehrbuch der Geburtshülfe, 9th ed., p. 708.
5. Ibid, p. 707.
6. Hand. d. Geburtshülfe, Vol. II., p. 76.
7. Ibid, p. 78.
8. Handbuch d. Geburtshülfe, last ed., p. 372.
9. Lomer, American Journal of Obstetrics, Vol. XVII., 1884.
10. Runge, Archiv für Geburtshülfe, Vol. XLI.
11. New York Polyclinic, 1896.
12. Monatschrift f. Geburtsh. and Gynækol., Vol. IV.

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BLOODLETTING AS A THERAPEUTIC MEASURE.[1]

By C. A. MURRAY, M. D., Van Etten, N. Y.

THE subject of bloodletting is probably at present the most unpopular theme known to the profession. It used to be the scapegoat upon whose head was heaped all our sins. It is that great mogul of which Prof. Reid has said: "Less slaughter I am convinced has been effected by the sword than by the lancet, that minute instrument of mighty mischief."

We need not be told that this is one of the most potent agents which the physician has to wield in the treatment of disease. It is

1. Read before the Chemung County Medical Society, at Elmira, N. Y., May 18, 1897.

potent for good and for evil. It may save life or it may destroy it. It is, therefore, obvious that the conscientious practitioner should be fully informed in regard to the effects and even remote consequences of venesection as a therapeutic agent. It is all the more necessary that this subject should be carefully investigated, as there is much reason to fear great mischief has been done in former years by its indiscriminate use.

The first obvious effect of bloodletting is the diminution of the actual quantity of blood circulating in the system. The second effect is impoverishing the quality of that blood; for immediately after a bleeding the blood vessels absorb watery fluid from every part of the system to compensate for their depleted condition and thus the blood is rendered more watery, less rich and less stimulating to the heart and arteries.

Another effect is to diminish the activity of the circulation. The vessels being less full, contract less powerfully upon their diminished contents and thus the pulse, that great index of the heart's action, becomes smaller. Less blood and of a less stimulating quality is sent to the capillaries and their action is diminished. The evidence of this is seen in the paleness which ensues after a bleeding and the same is true of every part of the system.

These, then, are the two effects produced on the vascular system by bloodletting—lessening the quantity and impoverishing the quality of the blood and as a consequence impairing the action of the heart and arteries. He, therefore, who would have his heart and brain fed with rich blood should avoid the use of the lancet. The energy of the brain depends upon the stimulus it receives from the arterial blood flowing through its substance. It is evident that whatever deranges the circulation must also derange the condition of the brain. Many physiologists claim that the actual quantity of blood in the brain is generally very much the same. It is mainly, therefore, the alteration in the composition of the blood that affects the brain. The condition of the circulation also affects it. For example, though the quantity of blood in the brain may not vary much, yet the quantity circulating through it in a given period may vary greatly, according to the frequency of the contractions of the heart; so, also, may the power or momentum with which the blood is driven by the heart to the brain, and in both these ways may the energy of the brain be impaired.

Now, as already stated, bloodletting impairs the action of the heart. The circulation becomes slower and the force with which

it is driven to distant parts is lessened. The brain participates in this general effect. The blood is driven less forcibly to this organ and the quantity circulating through it in a given time is less. The result is, the energy of the brain is impaired. Accordingly giddiness, sickness at the stomach, and even fainting comes on. Also, many outward circumstances modify the effect of bloodletting, for instance, age; children, when bled to faintness, recover slowly, and this condition is not unattended with danger of convulsions and even death. Great caution, therefore, is necessary in bleeding children. From twenty to fifty years man is in his greatest vigor and it is during this period that the loss of blood can best be borne. In old age the action of the heart is impaired. The circulation becomes slower and the general powers fail, so that under the loss of blood reaction does not so readily take place, and if the quantity be large, great prostration will follow. Great caution here is also recommended.

Again, females, owing to the delicacy of their constitutions, do not bear the loss of blood as well as males. There are three epochs or periods in their lives which require attention in this relation—namely, menstruation, pregnancy and the period following the cessation of the menses. The influence of menstruation is so slight it need scarcely be noticed when considering the propriety of bloodletting. During pregnancy, however, loss of blood is better borne than in the natural condition and larger quantities are required to be abstracted to subdue disease. After the cessation of the menses, the natural tendency is to become plethoric. This is the natural consequence of the suspension of any physiologic discharge. Hence, at this period, diseases indicative of this condition are more common, such as apoplexy, paralysis, hemoptysis, scirrhus and many other maladies. Therefore venesection at this period is well borne.

Besides these constitutional peculiarities, others equally important result from habits and mode of life. A person bred to habits of industry and temperance, and, along with these, enjoying the benefit of wholesome food, pure country air and, above all, a mind free from care and depressing passions will bear venesection incomparably better than one whose constitution is undermined and whose vital energies are wasted by the unavoidable deprivations to which the poor are subject, or by the voluntary excesses, debauchery and intemperance of the rich. With regard to the use of the lancet in persons who have long been addicted to habits of intem-

perance great caution is necessary. In fact, I believe its use in such cases should be almost entirely interdicted. Dr. Watson (you will perceive we have to go back a good way to get authority on bloodletting) lays great stress on the buffy coat of the blood drawn, as indicating to some extent the height of the inflammation and hence the propriety of the bleeding. When the inflammation is high the blood drawn is frequently both buffed and cupped. Now I have shown that bloodletting reduces the quantity of the blood and impoverishes its quality and said, he who would have his heart and brain fed with rich blood should avoid the lancet. You will remember when the great Roman general, Regulus, was taken prisoner by the Carthagenians, he was offered the ransom of his life on what he considered dishonorable terms and when asked why he did not accept, he told them it was because he was a Roman, and he further said to those inferior Carthagenians, "if the bright blood which feeds my heart was like the slimy scum which stagnates in your veins, I should, doubtless, accept your ignoble terms and save my life." I quote this merely to show the value placed upon rich blood by all enlightened people.

But I come now to show you when this richness becomes excessive. When the blood becomes loaded with this inflammatory product, this buffy coat, this plasma, this organising matter, this coagulable lymph, which causes the pleura to adhere, the lungs to be filled with hepatisation, the trachea with fibrous false membrane, excessive inflammatory disease is present, and the surest, quickest and best way to reduce the blood to the standard of health is to use the lancet, which is the powerful means in our possession of reducing the pulse. I acknowledge hypodermatic injections of veratrum viride, morphia and other sedations may reduce the inflammation somewhat, yet these remedies obscure the symptoms and are not so rapid, so sure and reliable as bleeding.

Dr. Marshall Hall, many years ago, gave us a classification of diseases with reference to their ability to bear the loss of blood, which I have considered so able and so scientific that I have always followed it and have never had occasion to regret it. First, he classes congestion of the head and a tendency to apoplexy. These diseases, according to his classification, bear bloodletting best of all. Second comes inflammation of serous membranes, as of the pleura, peritoneum and the like. Then follows a long list of diseases not necessary to enumerate.

The first case to which I call your attention is one of puerperal

eclampsia, which disease I believe to be a species of apoplexy and consequently coming under Dr. Marshall Hall's first classification, hence bearing bloodletting best of all.

CASE I.—Mrs. K., living near Spencer Village, was taken in convulsions after confinement, the second day. The attending physician called counsel with no beneficial result. The third day I was called alone to see the patient and found a case of profound coma, occasionally interrupted by a violent convulsion, accompanied by frothing at the mouth and opisthotonos. I found the pulse hard and full, which is generally characteristic of this disease. My resolve was instantly taken. I fortified myself by showing the utter hopelessness of the case in its present condition and proceeded to bleed in a recumbent posture, to actual syncope.

Fearing the bleeding had been excessive, I immediately gave her the benefit of position by allowing her head to hang off the bed, supported by an assistant, so that the blood might gravitate to the brain and thus support the heart by nervous influence, and not until a full half hour had elapsed was the volume of pulse sufficiently restored to allow the replacing of the head upon the pillow. In about an hour more she was seized with another convulsion. Thoroughly discouraged, I thought there was no hope and left the patient, promising to call again next morning. I failed to appreciate the fact that her brain had been under this terrible blood pressure two whole days and could not be expected to be immediately relieved. The next morning I was surprised to find the coma entirely gone, patient conscious, knew me, could talk, ultimately made a good recovery and I believe is alive today, though this happened about thirty years ago. I thought at the time the bleeding had been slightly excessive. I was, however, afterwards convinced that less bleeding would not have saved the patient. We must have courage to take sufficient blood to relieve the brain.

CASE II.—About ten years ago I was called early one morning to see Mrs. K., living about seven miles from Van Ettenville, and found her in convulsions at about the seventh month of utero gestation, in her first pregnancy. Dr. Dumond, of West Danby, was called as counsel. I suggested bleeding, according to my custom, to which he gladly gave assent, considering her case almost hopeless. She was accordingly bled about eighteen ounces, a large bleeding for a slender woman of eighteen years. This bleeding stopped the convulsions and relaxed the os uteri to such an extent that we succeeded in about eight hours in delivering her of a seven months' fetus, which lived about five hours. A remarkable symptom in this case was the total blindness which existed—a symptom which I believe commonly exists in eclampsia, but is frequently overlooked because the patient in her unconscious condition is

unable to tell us she cannot see. We were thoroughly discouraged by this symptom, but kept her quiet and found next morning that her brain had cleared, sight was restored and that she was conscious. She made a good recovery. This case was considered the more remarkable from the fact that three other cases of this disease had happened in that vicinity which failed to be bled and all three died.

CASE III.—About five years ago I was called in the night to see Mrs. W., living about four miles from Van Ettenville, but on account of the darkness of the night and deep snow, I was unable to see her until daylight and then only by a circuitous route. I found her in the seventh month of pregnancy; primapara; had been in convulsions about eight hours. I immediately bled her largely, after which the convulsions were milder. I called Dr. Gee in counsel, who, like myself, could see no hope. I, however, remained with her and during the next night succeeded in delivering her of a dead fetus, but on account of the extreme prostration, dared make no attempt to accomplish the third stage of labor, which delayed for some hours. Unconsciousness continued. Yet this lady in her extremity insisted on getting well and did so. She made a good recovery and two years later was delivered of a healthy boy.

It may be interesting to note that this woman had another attack of eclampsia at this, her second confinement. After the labor was fully accomplished she had one terrible convulsion. But, profiting by my former experience with her, I bled her so quickly and freely that she didn't have another, but made a good recovery. A remarkable feature in this case was loss of voice. It was three days before she uttered the first articulate sound.

You will, therefore, perceive, while most severe cases of puerperal eclampsia die, I attribute the success I have had in the treatment of these cases to free bleeding. I believe there is no other rational treatment. Some physicians place great reliance upon hypodermic injections of veratrum viride, and justly so. Yet I believe this remedy does not clear the brain equal to bleeding and in large doses is equally debilitating and dangerous. Many practitioners claim its action is very uncertain and unreliable. Not that I would bleed in all cases of puerperal eclampsia or apoplexy. Far from it; I would never think of bleeding in such cases unless the pulse warranted it.

This leads me to speak of the pulse. To be a good judge of pulse requires great tact, experience and discrimination. Many kinds of pulse are described by authors for the guidance of students; more, perhaps, than are practically necessary. From this mass I

have culled a few which I think should be critically studied by every student who aspires to be even a fair judge of pulse, as follows: frequent or infrequent, quick or slow, strong or weak, full or small, hard or soft, regular or irregular, oppressed or free. The mere frequency of the pulse can be determined by a watch. All else, as you perceive, is the result of feeling and sensation. So, while seeing is believing, feeling is the naked truth. One can soon learn to discriminate between a quick pulse and a frequent pulse, and so of the others. The oppressed pulse is perhaps the most peculiar. This pulse at first seems weak and small, but becomes fuller and stronger by depletion. Its indications of disease, carefully studied, are very instructive.

To acquire this skill in judging of pulse we should educate ourselves, especially our fingers, cultivate that learned touch, that tactus eruditus, so that we may know to a certainty whether a given pulse will bear bleeding. This skill was possessed by our fathers in exquisite perfection, when bleeding was more in vogue than at present, and should bleeding continue to fall into disuse I think there is reason to fear we shall not qualify ourselves as thoroughly upon this point as they did.

You will perceive this knowledge is more necessary when I state the fact that two eminent professors were once found disputing sharply whether a certain pulse was hard or soft; such disputes ought not to occur among educated physicians. This judgment of pulse is equally necessary in cases which do not require bleeding, as it is an unerring guide to our treatment and tells us whether in a given case we ought to administer tonics and stimulants or sedatives and depressants.

The second classification of Dr. Marshall Hall, *i. e.*, bleeding in inflammation of serous membranes, reminds me of a circumstance which occurred when I was a student of medicine. My preceptor, Dr. C. C. Cook, of Newfield, was called to the adjoining town of Enfield to visit a patient that had been treated by a notorious quack of that town who called himself Dr. Woodruff. (We had no legal protection against quacks in those days.) He had treated this patient, as he thought, thoroughly and had given him large doses of his favorite cathartic, which he called "scratch about," but without result. Dr. Cook on examination found a case of acute peritonitis, abdomen distended and very tender. He placed his educated fingers upon the wrist and detected the kind of a pulse calling for the lancet. He immediately bled this patient to faint-

ness; the moment he fainted the inflammatory spasm of the peritoneum was relaxed and the action of the bowels was terrible, the result, no doubt, of the large doses of "scratch about" he had taken and which the bleeding had set free. "There," said my preceptor, "Dr. Woodruff, clean up your patient, take good care of him and he will get well," which he did. This principle of relaxing inflammatory spasm of the peritoneum by bleeding to faintness was well understood at that time, was freely practised and was not then considered dangerous. The physician today who wields the lancet must have exquisite judgment regarding its use. We well know when blood is once drawn from the veins it cannot be replaced and the terrible prostration which follows may be fatal; hence prudent physicians hesitate and fear to take the responsibility. Therefore, while we deplete with one hand, we must be ready many times with the other to build up with powerful stimulants and tonics. Just why this is so, more than of old, the most scientific cannot tell; nevertheless the fact remains.

I will state here I have seen results equally remarkable from bleeding in cases of acute pleurisy, also in the pneumonias of forty-five years ago and which were saved by bleeding; by the treatment which would probably prove fatal in most cases at this time.

And now these facts are before us and the question arises, shall we entirely discard from our list of remedies this potent agent for controlling disease and thus probably sacrifice many valuable lives, or shall we educate ourselves, especially our fingers, to distinguish by the pulse, cases that require bleeding? I deplore the total decline of bloodletting. I believe the physician who, through fear, fails to bleed his patient when necessary, does not accomplish his whole duty. The fact that bloodletting in former years has been largely overdone is no excuse for its total suppression today. I am, therefore, one of the few who believe there are occasional cases, even in this age of debility and neuralgias, of nervous diseases and typhoid conditions, in which bleeding is not only beneficial, but absolutely necessary.

THE CARE OF CHILDREN'S TEETH.—The care of the teeth cannot be begun too early. If a child loses those of the first set prematurely the jaw contracts, there being nothing to prevent it from so doing; the second teeth have not space to stand properly and are crowded. Particles of food lodging between the teeth cause them to decay early. It is a wise precaution to teach a child to pass a thread of silk or dental floss between the teeth after eating, as well as to brush them regularly. Salt and water is a good antiseptic and answers for a dentifrice as well as many more elaborate preparations.—*Ladies' Home Journal.*

Society Proceedings.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

Proceedings of the Tenth Annual Meeting, held at Niagara Falls, N. Y., August 17–20, 1897.

First Day—Morning Session.

THE Association met at the Cataract House under the presidency of Dr. James F. W. Ross, of Toronto.

An address of welcome was delivered by Dr. W. R. Campbell, of Niagara Falls, which was responded to by the President.

The first paper was read by the Secretary of the Association, Dr. William Warren Potter, of Buffalo, entitled

PRINCIPLES OF TREATMENT IN PUERPERAL ECLAMPSIA.

The author, at the outset, referred to the views advanced by M. Charpentier at the Geneva Congress last year, relative to the treatment of puerperal eclampsia, especially as to the applicability of the induction of premature labor for its relief and which he said was so at variance with those that he had been accustomed to entertain and the verity of which he had so frequently tested, that he confessed surprise thereat. It was not in any spirit of controversy that he ventured at this time to oppose M. Charpentier's teachings, but simply in the interest of professional progress and science. The author then gave his own views regarding this subject, saying that they were fortified by an experience and observation extending over a period of many years. Furthermore, in the application of the principles he would lay down and advocate, a measure of success had been obtained at his hands that did not present itself under a contrary method previously pursued. The chief object of the paper was to advocate principles which the speaker grouped under the following heads:

1. Though the pathogenesis of eclampsia is unsettled it belongs solely to the pregnant or puerperal state. It is not apoplectic, epileptic or hysteric in character.

2. It depends upon toxemia due to overproduction of toxins and under-elimination by the emunctories.

3. These toxins probably have their origin in the ingesta, in intestinal putrefaction, in fetal metabolism, one or all, and there

is coëxisting sluggishness, impairment or suspension of elimination.

4. When the prodromes of eclampsia appear, the kidney should be interrogated as to its functions and all symptoms carefully watched.

5. Treatment is preventive and curative. Preventive treatment is medicinal and hygienic; curative treatment is medicinal and obstetric.

6. Milk diet and distilled water should be given in the pre-eclamptic state to dilute the poison, hasten its elimination and nourish the patient.

7. Bloodletting should only be employed in plethora or cyanosis. It is liable to cause anemia if persisted in or repeated, whereas red blood corpuscles must be conserved, not wasted. Glonoin diminishes vasomotor spasm, hence may be given freely in appropriate cases. Veratrum viride is a cardiac depressant and a dangerous remedy if pushed to an extent that will control convulsions.

8. Eclampsia is the expression of a further maternal intolerance of the fetus; hence, as a prime measure, the uterus should be speedily emptied of its contents.

9. Medicinal treatment alone is delusive and, when relied on exclusively, is fraught with danger to both mother and fetus; whereas in the prompt induction of labor is found a rational application of science to a desperate condition.

10. Finally, it furnishes, in the present state of our knowledge, the only basis of expectation for a diminished mortality in a toxemic disease of high death-rate.

Dr. John M. Duff, of Pittsburg, opened the discussion and said, relative to the induction of premature labor in cases of eclampsia in which albuminuria is present, that conscientious practitioners would not hesitate, although in exceptional cases careful attention to medicinal treatment would cause the albumin to disappear and the patient would go on to normal labor. As a diuretic, he had secured excellent results from the use of milk, with a spoon, as hot as it could be borne by the patient.

Dr. H. W. Longyear, of Detroit, was surprised that the essayist did not mention the necessity of inducing premature labor before the occurrence of eclamptic symptoms. Such treatment appeared analogous to snuffing out the light of a fuse after an

explosion had occurred. Premature labor should be brought about in every instance in which a daily examination of the urine showed a constantly increasing amount of albumin, with prodromal symptoms of toxemia. During the past year he had induced premature labor twice under these circumstances. In one case the patient was seven and a half months pregnant and in the other eight months. He would not advocate this course merely because albumin was present in the urine, but because of this and the fact that the amount of urea eliminated was constantly decreasing. Hot milk was very valuable, in his opinion, in the treatment of these cases.

Dr. Walter B. Chase, of Brooklyn, stated that the decrease in the daily amount of urea was a most valuable indication of the probable occurrence of toxemia in these cases. Unfortunately, many eclamptic patients were seen for the first time only when in convulsions and then the induction of premature labor was the single measure that could be relied on. In certain cases, however, in which the urine clears after a few days, it was unjustifiable to end the period of gestation prematurely. The best method of stopping the convulsions, particularly when arterial pressure is high, is by the administration of veratrum viride.

Dr. W. H. Wenning, of Cincinnati, doubted the advisability of bringing on premature labor under all circumstances in which toxemic symptoms develop. In many cases, if the os was rigid and not dilated, there was danger of inducing convulsions in the attempt of the obstetrician to dilate. He considers the psychologic element an important one. He gave the history of a patient who presented no symptoms whatever of toxemic infection, there being no albuminuria or edema present, but who died shortly after the birth of her child. Another patient fearing that her child might be born before the expiration of nine months from the date of her marriage, was in a state of constant nervousness on this account and when labor finally took place forceps had to be used. The patient soon developed a condition of marked apathy and would pay no attention to her child. On six different occasions she had a convulsive seizure immediately after the physician's visit and just as he was leaving the house, but each immediately ceased on his being recalled. The patient finally died, although there had been no true symptoms of toxemia.

Dr. Charles Stover, of Amsterdam, N. Y., said an important point was, how soon can the condition of puerperal eclampsia be

diagnosticated? He emphasised the importance of a daily analysis of the urine. If the physician is called to see a patient late in the progress of the case, the urinalysis might present entirely different features from that in the beginning. He knew of three cases which occurred during the past three months in which the attending physician had waited for more marked symptoms to occur after albuminuria had developed and each of the patients died. He referred to the method of Dr. James H. Etheridge, of Chicago, of estimating the amount of urea and considered it a valuable one. He also spoke of a case which came under his own observation, in which but 500 grains of urinary solids were excreted daily when there should have been 1,300, the patient developing eclampsia.

The President, Dr. James F. W. Ross, said that he had found that the occurrence in females during early life, of exanthematous fevers, had a marked influence on subsequent renal insufficiency; and in more than one instance he had been able to trace this insufficiency to an attack of scarlet fever or diphtheria occurring during childbirth. The question of puerperal eclampsia was still unsettled; its pathology was shrouded in darkness and a step forward would be for the larger medical associations to institute a series of investigations with the hope of determining its cause. In many of the worst cases premonitory symptoms were not present at all. He considered it unwise to use haste in emptying the uterus, when this has been determined on, as there was great danger of lacerating the parts. The question as to the advisibility of inducing premature labor in the case of a patient who in a former gestation had eclamptic attacks, but in whom at the time of the subsequent pregnancy no symptoms of toxemia were present, was an important one. The speaker had terminated the period of gestation in a number of cases of this sort and believed such action entirely justifiable, although it cannot be denied that a woman might go through a number of pregnancies normally before the occurrence of a second series of eclamptic seizures.

Dr. Longyear—Would you advise the induction of premature labor under these circumstances if there are no symptoms whatever of renal insufficiency?

President Ross—Yes. (The President then reported a case in which he had practised it.)

Dr. Rufus B. Hall, of Cincinnati, looked upon such a doctrine as extremely dangerous and strongly opposed it. Simply because

a woman at some previous time had had eclampsia was not sufficient reason for terminating gestation prematurely when no symptoms of toxemia were present.

Dr. POTTER, in closing the discussion, said the occurrence of albuminuria was a danger signal, but that decrease in the daily amount of urea excreted by a pregnant woman was still more valuable as a prodromal sign. The violent production of premature labor was never justifiable. If eclamptic attacks occurred some time previous to labor the physician might take time in emptying the uterus, but in the intrapartum variety, the cervix should be carefully dilated by means of a steel dilator and the hand and, if necessary, forceps applied and the fetus delivered. He had accomplished this within three hours when the cervix was rigid, without lacerating the tissues and had saved the life of both mother and child.

Dr. H. W. LONGYEAR, of Detroit, read a paper on

PUERPERAL DIPHTHERIA,

the object of which was to bring before the profession the fact that the Klebs-Löffler bacillus is a potent factor in the etiology of puerperal infection, six cases being reported in proof of the position of the writer. The diphtheritic character of each case was determined not only by clinical evidence, but by bacteriologic examination made by the bacteriologist of the Detroit Board of Health. Five of the cases recovered and one died, the one death being the only case in which antidiphtheritic serum was not used.

The writer recommends bacteriologic examination in all cases of puerperal infection, condemns curetting in all cases where a membranous exudate is present, and recommends the use of antidiphtheritic serum, the intrauterine application of a strong solution of iodine and carbolic acid at the beginning of treatment, drainage of the uterus by a tube, intrauterine irrigation with antiseptic solutions, bi-hourly vaginal injections of hydrogen peroxide, and the usual supportive treatment with quinine and whisky. In mixed cases of Klebs-Löffler bacillus and streptococcus he would first use the antidiphtheritic serum, and then in twenty-four to forty-eight hours begin the use of the antistreptococcic serum. He believes that the true character of this form of infection has not been heretofore recognised, but that it will be found to be more or less prevalent in all localities in which diphtheria exists if sufficiently critical examinations are made. The physician and mid-

wife are warned to use especial care in such localities, as the post-partum parturient canal furnishes the most favorable soil for the growth of the Klebs-Löffler bacillus.

Dr. John M. Duff, of Pittsburg, followed with a paper on

THE SOURCE OF PUERPERAL SEPSIS.

The source of puerperal sepsis, he said, was given by the authorities as contagion from a woman similarly affected, from suppurating or decaying tissues, from putrefying substances within or without the body; and from zymotic diseases, especially erysipelas and diphtheria.

The exact source in any given case was not always easy to determine. In a large proportion of cases, however, a careful inquiry would be rewarded with the revelation of a source. When found it generally proved to be one which could have been avoided.

Aseptic midwifery had done much to prevent puerperal sepsis, and consequently to lower the rate of mortality following childbirth. He had heard and read remarks by members of the profession in sentiment expressing the opinion that the accoucheur who was so unfortunate as to have a case of puerperal sepsis occur in his obstetric work was guilty of malpractice. Such expressions he thought were extravagant and were not warranted by our present knowledge and experience. Sepsis does occur sometimes despite the best efforts of the practitioner to prevent it. While he believes puerperal sepsis cannot always be prevented, he does believe that with ideal surroundings, with a careful and skilful physician, supplemented by an educated and conscientious nurse, the number of cases could be reduced to a minimum. His observations teach him that while on the one hand there was no attempt at aseptic or antiseptic precautions, there was frequently too much reliance placed upon antiseptics. For instance, a well-known member of the profession had said in his hearing a short time since that he felt perfectly safe in going to attend a case of labor after waiting upon a case of erysipelas or diphtheria, if he washed his hands well in a strong bichloride solution. Dr. Duff thinks his patients will be safer if he went to them under such circumstances with fear and trembling, which would cause him to perform further ablutions if possible.

Without discussing at length the different known sources of infection or defining the varieties of sepsis, the author reported fifty cases of puerperal sepsis that had come under his observation.

These two papers were then discussed together.

Dr. A. Goldspohn, of Chicago, said such papers as the one presented by Dr. Duff were calculated to do a great deal of good. The old idea was still prevalent that puerperal fever was something specific. This was a mistake. It was an infection, just the same as a phlegmon or other inflammation which occurs in any other part of the body. The cause of it was thoroughly settled, viz., septic germs. Men who had labored exhaustively in Europe on this subject had come to the conclusion that the most dangerous germ of the disease was the streptococcus, which was present in about 4 per cent. of the cases.

Dr. Lewis S. McMurtry, of Louisville, said physicians were apt to think that because puerperal sepsis had been discussed a number of times and so much had been written about it, that professional sentiment was crystallised and that it was a work of supererogation to agitate the subject, but if we would look around us in our respective localities we would find that the number of deaths from puerperal sepsis is very large. He sometimes thought that we do not realise at the present time, in large cities and in country districts, how great the mortality is from this altogether preventable disease, and until the mortality is reduced very materially the subject should be discussed repeatedly and published to the profession, showing the responsibility and duty that rest upon practitioners.

Dr. Charles G. Cumston, of Boston, spoke of the principal cause of puerperal sepsis from a pathologic standpoint. In 1893 he conducted a series of experiments with reference to the bacterium coli. Among the specimens and autopsies that he performed in view of ascertaining the virulence of this organism he had five cases of puerperal septicemia, in all of which the uterus was carefully examined. The folds of the membrane lining the uterine cavity contained the bacterium coli, as was subsequently proven by cultures. Two of the uteri were removed by the vaginal route and on the other three patients he performed autopsies. He could not give the clinical history of the cases, but only the anatomic and bacteriologic findings. A second cause of puerperal septicemia and a potent one was the gonococcus, in that it prepares the way for pus-producing organism to enter the uterine cavity and thus set up infection.

Dr. James F. Baldwin, of Columbus, Ohio, stated that in three cases of so-called puerperal fever that had come under his observa-

tion the infection was found to be due to appendicitis and he supposes it was attributable to the bacillus coli communis. Two of the cases were operated on and recovered. The third case was operated on by another surgeon and died.

Dr. Wm. Warren Potter, of Buffalo, drew attention to the point that in discussions on this question as presented to societies and even in magazine articles, there was a disposition to drop from the literature of the subject the term puerperal fever. There were some old fashioned things that the profession need to cling to because they were good, but puerperal fever was no longer recognised as a distinct entity. The term was misleading in itself, because it teaches an erroneous pathology and points to an equally erroneous treatment.

Dr. Adam H. Wright, of Toronto, said that in the majority of cases of puerperal sepsis the poison comes from without and the condition can be avoided. It is a preventable disease.

Dr. Edwin Walker, of Evansville, Ind., said that it was a much more rational thing to dry out the genital tract than to wash it out. He would admit that even if the genital tract was dried out we could not get rid of all the germs, but we could deprive them of their nourishment. If we use a douche of clean water we furnish the germs a pabulum for their nourishment. In puerperal sepsis he would advise wiping out the genital tract rather than douching it.

President Ross said he had seen a large number of cases of puerperal sepsis in consultation, owing to the fact that the patients had either pus tubes, pelvic abscess, or some such condition present, although he did not do an obstetric practice. He gives the causes of puerperal sepsis as follows: (1) gonorrhea; (2) retained placenta or membranes; (3) dirty hands and instruments; (4) lacerations of cervix and perineum, improperly repaired or protected; (5) intra-abdominal disease or tumors.

Dr. Albert Vander Veer, of Albany, said he was quite sure that he reiterated the experience of other abdominal surgeons when he said that it was sad to witness the amount of ignorance that existed in regard to careful aseptic obstetric work. If we are to use serum therapy, it is very essential to make a differential diagnosis, as was touched upon by Dr. Longyear, and the speaker fancied that the future history of this work would be in the direction of the serum of streptococci. The cases must be seen as early as possible.

Dr. Albert Goldspohn, of Chicago, said the gonococcus was not the exciting, but merely the predisposing cause of puerperal sepsis. There was no case of puerperal sepsis on record in which the gonococcus alone was the cause of the trouble. Other pus microbes were present in this condition and the infection was a mixed one.

First Day—Afternoon Session.

Dr. Adam H. Wright, of Toronto, read a paper on

TOXEMIA OF PREGNANCY,

in which he said that the chief symptoms of this condition were salivation ; disorders of digestion, with sometimes a peculiar taste and constipation ; general malaise ; anemia ; nervous disturbances or headache ; disorders of vision ; irritability ; deficient excretion of urine or some of its constituents and albuminuria. To speak briefly, he thought any sign of the slightest departure from ordinary health during pregnancy should make us suspect the advent of general toxemia and should receive careful investigation and thorough treatment. If, for instance, there be general malaise, with slight headache, but no albumin in the urine, let us not be deceived, since albuminuria was one of the symptoms of systemic poisoning and sometimes the last to appear. Its absence proved absolutely nothing.

Coming to the treatment, reference was made to milk diet for toxemia or albuminuria of pregnancy. He believes that a purely milk diet is good for young babes and calves, but he does not think that it is suitable for adult human beings. Yeo, in his admirable book on Food in Health and Disease, shows clearly that milk is not a suitable food for healthy adults, because it contains an excess of albuminates and fats and that it should be mixed with other foods, especially the carbohydrates. If it be conceded that milk alone is not the best food for healthy adults, it is difficult to conceive how it can be the most suitable in any case of disease.

In connection with his results in the Burnside Hospital, in nine years they have had sixty-five cases of toxemia with albuminuria with two deaths, both from eclampsia. One of these two patients came into the hospital in a dying condition with eclampsia, having received no previous treatment. In the sixty-five cases mentioned there were many cases where the albuminuria and other symptoms were only slight.

In conclusion, the author enumerated the main points in his treatment as follows: (1) a carefully selected mixed diet with plenty of water, plain and mineral, lemonade without sugar and the like; (2) rest, good hygienic surroundings and proper clothing; (3) the regular and persistent use of purgatives for weeks or months, with a preference for epsom salts; (4) a warm daily bath; (5) the induction of abortion or premature labor in rare cases.

THE TREATMENT OF PUERPERAL ENDOMETRITIS BY THE CAROSSA METHOD.

By EDWARD J. ILL, M. D., Newark, N. J.

There appeared a pamphlet early in the winter of 1896, by K. Carossa, describing a method which consists simply in the use of alcohol as an irrigating material, supplemented by gauze packing of the uterus in such a way that the alcohol finds its way into the most distant recesses of the uterus. A catheter is introduced into the uterus and this organ filled with absorbent gauze in a lightly but thorough fashion. At the external end of this catheter a funnel is attached, through which a 20 to 25 volume per cent. of alcohol solution is poured so as to flow into the gauze with which the uterus is filled. The quantity to be used is from 30 to 50 c.c. every hour, day and night. In three to six days the gauze is removed.

The originator of this method presents some fantastic theories of the evaporation of alcohol which the author of the paper cannot agree with and to which Dr. Carossa attributes his results. Dr. Ill has used the above method, slightly modified, with good results and recommends it for further trial, especially so on account of its great simplicity.

Dr. RUFUS B. HALL, of Cincinnati, read a paper entitled

SEQUELÆ FOLLOWING SUPRAVAGINAL HYSTERECTOMY.

He said he thought the profession has been too hasty in approving the present methods. It had taken the stand that there was nothing more to be desired; the operation was complete. While the author had no new method to offer, he hoped the discussion of his paper would suggest something to improve the technique of the present methods.

He referred to objections to the extraperitoneal method and then spoke more in detail of total extirpation. He was one of the first to advocate and make this operation and he had attained excellent results with it. However, it did not meet his ideas of a perfect operation. The final results were good, but there was a

primary difficulty that was disagreeable. Suppuration necessarily took place about the ligatures on the sixth or seventh day, causing a slight rise in temperature. To overcome the suppuration, he used specially prepared catgut for the ligatures below the peritoneum. He found the catgut unreliable on account of the danger from hemorrhage through slipping of the knots and so abandoned its use.

After seeing Dr. Kelly, of Baltimore, in 1895, make the supravaginal operation with his modifications in the technique of the Baer method, Dr. Hall adopted that method. He operated according to it forty-six times, but was not pleased with his results. Eleven of the cases had post-operative sequelæ, due to the buried ligatures. All the patients made good primary recoveries, only one showing any signs of trouble earlier than the seventh week. This one had a discharge of pus from the vagina at the end of the fourth week. The discharge disappeared to return again at intervals of a few days to four or five weeks, and only ceased when the ligatures were removed. The other cases had similar histories, except that they did not have any trouble until from four to eleven months after the operation. Within a few days after the ligatures were removed, the patients were well and have remained so, except two. These two, one sixteen and the other eighteen months since the operation, are still having trouble as the ligatures have not all come away. The author said he knew the material was not at fault or there would have been trouble immediately following the operation. Besides, the same material was used in other operations and no trouble resulted. He said he believed a large percentage of the patients so operated on would certainly have this trouble. The general surgeons are abandoning the use of silk, silkworm gut and silver wire in Bassini's operation for this very reason, and he felt it only logical for the gynecologist to expect to have to do the same. He urged the other gynecologists to tell their results with this method and compare notes.

The author closed his paper by saying that in spite of the fault he had to find with total extirpation, he preferred it to supravaginal hysterectomy as practised by Baer and modified by others. He felt more certain of his final results with the former method.

Dr. George M. Hughes, of Philadelphia, read a paper on

THE SEQUELÆ OF DEAD LIGATURES AND SUTURES.

While assisting Dr. Joseph Price in his abdominal work the essayist had recently been greatly interested in a number of cases

in which he reopened the abdomen for the freeing of adhesions and the removal of dead ligatures and sutures. Sutures and ligatures should be of that material which is easiest sterilised and which combines great strength in a small bulk. It was always preferable to use a material capable of being rendered aseptic by heat or boiling. If this could be done, we could at all times have the means at hand to render our ligatures perfectly sterile. For this purpose he finds that for pedicle ligatures and for bowel work the twisted Chinese silk is the best, of finest quality and sufficiently small to secure safe tying; for closure of the abdominal incision silkworm gut and the through-and-through method. What becomes of the ligatures? If small and sterile, they become encapsulated and rapidly absorbed. If plaited ligatures and large hawsers are used, whether infected or not, they are never absorbed, but their presence as foreign bodies give a train of symptoms unbearable in their distress and constant in their duration. The same conditions are found about the pedicles, only here we have the adhesions of omentum, large and small bowel and bladder to both the pedicles. To obviate post-operative sequelæ we should select that method of applying ligatures which gives safety with the least quantity of material. For pedicles the simple figure-of-eight tie is the best, in that it gives a firm, small, strong tie and one not liable to slip. The pedicle is then cut cone-shape. The pedicle must be made as small as possible; large pedicles are prone to behave badly, and to this is due the post-operative adhesions of omentum, bowel or bladder. To illustrate his remarks the essayist selected and reported five instructive cases.

Second Day—Morning Session.

POST-CLIMACTERIC CONDITIONS THAT SIMULATE ADVANCED UTERINE CANCER.

A paper on this subject was read by Dr. M. Rosenwasser, of Cleveland, Ohio. The writer commends the teaching that irregular hemorrhages and sero-sanguineous discharges, whether occurring during the parturient stage or long after the menopause, are good and sufficient reasons to suspect malignancy. We carefully watch for early symptoms and by their detection occasionally succeed in removing the disease while it is still local. On the other hand, we sometimes are caught off our guard when confronted by post-climacteric cases presenting all the classic characteristics of advanced malignant disease. Without the same circumspection exercised in

the early stages we thoughtlessly pronounce the case beyond remedy or hope, specifying even the extreme possibility of life. The text-books are deficient in not sounding a note of warning against possible errors in the late stages. The so-called classic symptoms may be due to other (not malignant) conditions of the genital tract. Owing to effacement of the vaginal portion of the cervix in old age the differential diagnosis is in most cases limited to corporeal diseases of the uterus. Before the diagnosis of corporeal cancer can be made, other diseases must be excluded.

The conditions which are likely to simulate advanced cancer are the following: (1) senile vaginitis; (2) foreign bodies in the vagina; (3) gangrenous fibroids; (4) atrophic, senile or post-climacteric endometritis; (5) post-climacteric pyometra.

Of these conditions the last is especially liable to lead to errors. The writer gave the details of a case of pyometra occurring recently in his own experience and submitted abstracts of five more or less similar instances found scattered in the literature of the past seven years. In all these cases either a positive or provisional diagnosis of corporeal cancer had been made.

In conclusion, the author called attention to the singular fact that in the presence of the essential conditions—age, low vitality, cicatricial tissue, adhesions, chronic inflammation and irritating discharges—cases of transformation into malignant disease are either unknown or exceedingly rare.

Dr. Richard Douglas, of Nashville, Tenn., followed with a contribution on

CERTAIN CYSTS OF THE ABDOMINAL WALL,

in which he confined himself to a consideration of abnormalities of the urachus, and reported an interesting case of urachal cyst which occurred in a woman 36 years of age, married eleven years and sterile.

CONSERVATION OF THE OVARY.

A paper on this subject was read by Dr. B. Sherwood-Dunn, of Los Angeles, Cal. The author said that Brown-Séquard believed and taught as a principle of physiology that every gland, whether or not provided with excretive ducts, gives to the blood a certain useful principle, the absence of which is felt and made apparent after their extirpation, or the destruction or modification of their functional activity by disease. The recent publication of researches made by Mond and Chrobak, of Vienna, Jayle and Lissac, of Paris,

Mainzer, of Berlin, and Muret, of Lauzanne, had given definite form to certain ideas that the speaker had conceived upon this subject, born of a series of observations taken in his hospital service in Paris of a variety of troubles and functional disturbances which more or less constantly follow as a result of double oöphorectomy. These various troubles and functional derangements, which are constant, although variable in degree, in women who have had the menopause anticipated by castration, form to his mind one of the strongest arguments in support of the glandular theory.

From observations made upon 100 cases operated upon in Broca and St. Louis Hospitals, in Paris, he found that where the woman had prematurely lost both ovaries 78 per cent. subsequently suffered a notable loss of memory; 60 per cent. were troubled with flashes of heat and vertigo; 50 per cent. confessed to a change in their character, having become more irritable, less patient, and some of them so changed as to give way to violent and irresponsible fits of temper; 42 per cent. suffered more or less from mental depression and 10 per cent. were so depressed as to verge upon melancholia. In 75 per cent. there was a diminution in sexual desire and some of these claimed they experienced no sexual pleasure; 13 per cent. were not relieved of the pain from which they suffered; 35 per cent. increased in weight and some became abnormally fat. Some complained of a diminution in the power of vision; 12 per cent. noted a change in the tone of their voice to a heavier, more masculine quality. Some 15 per cent. suffered from irregular attacks of minor skin affection; 25 per cent. had severe headaches, as a rule increased in intensity at the menstrual period. Equally as many complained of nightmare, more or less constant, while about 5 per cent. suffered from insomnia. In a few cases there existed a sexual hyperexcitability not present prior to the castration. He particularly noted a few cases presenting gastric reflexes, where without any premonitory symptoms or apparent cause the stomach would reject food or refuse to prepare it for intestinal digestion and the consequent distress following the fermentation compelled the patient to seek relief. It should be noted that usually these troubles were more marked in women under 30 or 33 years of age.

He had been favorably disposed to the hypothesis advanced by Brown-Séquard for some time, and any scepticism that he may have entertained of the theory of ovarian secretion and its usefulness and necessity to the equipoise of the whole system has been com-

pletely dissipated by the results of experiments made with ovarian substance, or ovarin, in patients who have lost both ovaries or were suffering from troubles which, in a greater or less measure, were due to a diseased condition of the ovary. In the observations of the authorities mentioned use was made of: (1) the ovary in its natural state; (2) the desiccated and powdered organ; (3) glycerin extract of the ovary; (4) liquid ovarin. The first form presents two objections, viz., difficulty of obtaining the fresh organ and greater difficulty in getting the patient to take it. The second form of powder has been the one most favored by all and has given as good results as the administration of the hashed fresh ovary or of the glycerin extract or the hypodermic injection of liquid ovarin, prepared after the method of Brown-Séquard and preserved in sealed tubes. The essayist has so far used only the powder and the tablets, the latter in only one case, which did not respond as quickly as the others and he soon changed to the powder. But he would not say that one is better than the other, as he had not given the tablets a fair trial, neither could he expect such good fortune as that the good effects observed in his three cases will continue in those that follow. The author closed with the report of three interesting cases.

Dr. James F. W. Ross, of Toronto, delivered the President's address. He selected for his subject

SURGERY AND FACTS.

He said the work of the association was confined between the diaphragm, the perineum and the abdominal walls and that the members had met to cultivate and promote a knowledge of whatever relates to abdominal surgery, obstetrics and gynecology. Attention was drawn to some unsettled questions, the first being peritonitis. Are we able to do more to save the lives of patients suffering from this disease in its acute form than we were ten years ago? Are we not but little better off with all our antiseptic and aseptic washes, gauze and tube-drains and purgatives? He was satisfied that surgery could carry us no further when battling with this disease. The question of operating upon the appendix and the diagnosis and treatment of ectopic gestation had been fairly well settled. The method of dealing with the pedicle in ovariotomy had been settled, except for the fact that some operators preferred silk, while others were assured of the safety of catgut. Operations upon the gall-bladder and gall-ducts had been per-

formed many times during the past ten years and they were now well recognised as proper surgical procedures. The operations of nephrectomy and nephrotomy were looked upon as everyday procedures, justified by the consensus of surgical opinion. Abdominal hysterectomy was an operation that had been much improved and simplified, some operators being still wedded to the clamp, while others preferred some of the other methods. The advisability of oöphorectomy for some fibroids could not be doubted. There were two operations performed that Dr. Ross thought are of doubtful value, viz., the fastening of the kidney to the side and the fastening of the uterus anywhere. He considers that these operations have been recklessly performed and unnecessarily done. Another class of operations to which more thought must be given were those for intraäbdominal and intrapelvic cancer. When peritoneal cancer has been diagnosticated, surely exploratory operation is uncalled for. Operations for other forms of cancer are of questionable utility. Take, for instance, resection of the cancerous intestine, gastroenterostomy for pyloric cancer and removal of the uterus for uterine cancer. Gastroenterostomy and resection of the intestine are poor makeshifts. For carcinoma uteri, vaginal hysterectomy is the only operation that should be contemplated, but at best it prolongs life but a short time.

Evening Session.

SOME OBSERVATIONS UPON VENTRAL FIXATION.

By Dr. Herman E. Hayd, of Buffalo.

In this paper it was stated that ventral fixation or suspension of the uterus, coupled with the various plastic operations upon the cervix and vagina is the only means, surgically or anatomically, which will fix and support for future comfort and well-being an extremely prolapsed uterus. However, because a uterus sometimes offers a serious impediment to delivery by interfering with the proper dilatation of the organ is no reason why the operation should be relegated to oblivion. *Per contra*, it should be employed to relieve that large class of suffering women who have passed beyond the child-bearing period and who most frequently are the victims of extreme procidentia uteri. In his last six cases of ventral fixation he sewed the uterus to the abdominal wall with chromocised catgut (No. 3) and did not even scarify the peritoneal covering of the uterus. He held the organ by thin sutures, which took in simply the peritoneum and the connective tissue over it; but

in one case where the organ was very heavy and the woman short and stout he hitched on to the rectal fascia and muscles. He has invariably sewed the anterior surface of the uterus, feeling more satisfied with the position assumed under these circumstances than where the sutures catch the superior and posterior surface, as is advocated in ventral suspension. In the cases he has operated on and those he has examined after operation of ventral suspension he has found the organ in a too anteflected position and it may be the cause of some future annoyance. He has discarded silk and all unabsorbable ligature materials, believing that catgut can be sterilised and rendered absolutely safe and is perfectly manageable.

Dr. C. C. Frederick, of Buffalo, N. Y., read a paper entitled

WHICH IS THE PREFERABLE OPERATIVE METHOD OF HOLDING THE UTERUS IN POSITION?

All retroversions do not produce symptoms, but a certain proportion are accompanied by hypertrophy of the uterus, endometritis, leucorrhea, pain, backache, menorrhagia, metrorrhagia or general malaise. Constitutional treatment fails to relieve a large proportion of them without restoration of the uterus to a normal position and a cure of the accompanying hypertrophy and endometritis by reposition. The large factors in the continuance of the ill-effect of retroversion are torsion of vessels, infection of the endometrium and defective drainage of the uterine cavity. Retroversion is a first stage of prolapse and ought, for that reason alone, to be replaced and held in position. Sterility is one frequent result of retroversion. Results of treatment are good by operation or by holding the uterus in position by a pessary, if possible, together with general tonic treatment, Weir Mitchell rest treatment and the like. A large proportion of cases are cured and eventually get strong and well again. Ventrofixation has been discontinued by the writer in women liable to bear children. He uses it only to hold up the uterus in operation for prolapse and in those cases where he has removed both tubes and desires to hold the uterus in position, time being an element in the operation. The writer has seen no ill results during labor and knows of none occurring in his own cases, although several have borne children. He has seen no recurrence of retroversion even in those who have borne children. His preference is given to the Alexander operation or some of its modifications in cases of women who have borne children and there are no adhesions or diseases of the adnexa. Women who have

never been pregnant are liable to have poorly developed round ligaments liable to tear away from the anchoring sutures. In these he opens the abdomen and shortens the round ligaments by one of the methods devised by Mann, Dudley or Wylie. He gives Mann's method the preference. Several of the patients have borne children both after the internal and external shortening of the round ligaments with good results. The writer now uses unabsorbable ligatures or sutures, always using plain catgut or chromicised catgut when a suture is used for a long period. He never has used any of the vaginal methods of fixation, not being pleased with them.

The uterus will now appear as far forward in either of the methods of shortening the round ligaments as it is in normal anteversion, but the pressure upon the posterior surface of the uterus will force the body into extreme anteversion and in a few months will appear perfectly normal in position.

Third Day—Morning Session.

THE TECHNIQUE OF THE DRY METHOD

was the title of a paper by Dr. Edwin Walker, of Evansville, Ind., in which he said that by the dry method is meant a technique in which no water or other fluid is used. This does not apply to the preparation before the operation. After the first stroke of the knife until the wound is closed, not a drop of water is used. The writer has employed it exclusively for several years with good results. The technique is as follows: nurses are instructed to use every precaution to prevent soiling the hands in septic cases and to thoroughly disinfect the hands after any suspicion of contamination. Every instrument used is sterilised before it is put away. The hands are scrubbed thoroughly with a brush, with liquid soap (equal parts of green soap, glycerin and alcohol), and repeatedly rinsed in sterile water. They are then wiped off with alcohol, dipped for two minutes in bichlorid solution, 1 to 1000, and then washed off with salt solution. The field of operation is similarly prepared, except that the scrubbing is repeated daily for two or three days before the operation, and a soap poultice used at night. The instruments are boiled in soda solution for five to ten minutes, wrapped in towels or placed in metal boxes, which are opened only at the time of operation. Plain gauze is used for every purpose, except packing the uterus, and in rare instances where drainage is used iodoform gauze is preferred. The silk ligatures are wrapped on spools and placed in glass boxes, and the

silkworm gut and silver wire in long glass tubes and all sterilised by steam, as are the dressings. The plain catgut is boiled in alcohol and the chromicised is prepared after Edebohl's method. After the patient is placed on the table the dressing, which consists usually of plain gauze, is removed from the field of operation, and sterilised towels adjusted as usual. The instruments are unwrapped, and everything is in readiness. The sponges are used dry and thrown away when soiled. The flat sponges in the abdomen are also used dry and are provided with a cord which is clamped with a pincette. The latter is left outside, so that the sponge cannot be forgotten and left in the abdomen. The author has not had extensive experience in puerperal sepsis or general septic peritonitis, but would be inclined to use it in both these conditions, for it has proven satisfactory in sepsis following abortions and localised collections of pus in the abdomen.

SURGICAL SHOCK AND HEMORRHAGE, WITH REFERENCE TO PREVENTION AND TREATMENT.

This paper was read by Dr. WALTER B. CHASE, of Brooklyn, N. Y., in which the author presented the following summary :

1. The treatment of shock should be preventive and curative, and to a large degree the indications for the former define the lines of treatment in the latter.

2. The proper exhibition of preventive measures includes a careful study of the functional activity and organic status of all important organs, and such treatment by hygienic, dietetic and therapeutic measures as will elevate the standard of bodily and mental health to a degree in which the maximum power of resistance may be produced and maintained.

3. Special emphasis should be given to lithemic and uremic excretion, and to the condition of the circulatory and nervous systems.

4. Knowledge as to inherited power of resistance to, and recovery from, serious disease and accidents, are of the highest value in determining the course of procedure and in estimating the chances for recovery after capital operations.

5. A supply of facilities and drugs for meeting all emergencies should be in constant readiness, with exact knowledge for the indications, dosage, physiologic and therapeutic effect of special heart tonics and stimulants, including strychnia, digitalis, nitroglycerin, and the like.

6. Limit the time of an operation to the shortest space compatible with thorough work and proper technique.

7. Save the patient from the shock of fear to the utmost, and in selected cases proceed to operation without informing the patient of your purpose.

8. In shock with hemorrhage supply the volume of venous and arterial loss by direct transfusion of normal salt solution into the patient's veins.

9. Bear in mind the influence position has on the circulation under both shock and hemorrhage, especially in anemic conditions of the cerebrospinal nerve-centers and the heart.

Dr. W. H. Wenning, of Cincinnati, Ohio, read a paper on

PLACENTA PREVIA, WITH SPECIAL REFERENCE TO TREATMENT.

(Published in full, see page 175.)

A paper entitled

COMPLETE HYSTERECTOMY AFTER INJURY DURING PARTURITION AND CESAREAN SECTION WITH REPORT OF CASES,

was read by Dr. Joseph H. Branham, of Baltimore.

The first patient was 24 years of age, female, married and had been pregnant for the third time. As the pelvic contracture was so marked there was no hope of a living child being born naturally; the child was delivered by Cesarean section. The patient lost considerable blood per vaginam after the operation and rapidly developed symptoms of septic infection. She died two days and a half after the operation. The question arose as to whether Cesarean section or symphysiotomy was the better procedure. The essayist thinks the latter would have given the best chances for recovery, but as infection had already taken place, in all probability the final result would have been the same and even craniotomy, under the circumstances, would likely have proved fatal.

The second case was one of rupture of the uterus. The mortality of this condition was said to be 80 per cent. The accident may occur at any time from the third month of gestation until the termination of pregnancy. The causes and prominent symptoms of rupture of the uterus were detailed. *Treatment:*—When symptoms of uterine rupture occur, delivery should be completed as rapidly as possible by the use of whatever means may best bring about the results. The child nearly always dies in a few minutes, so that only the mother should be considered. If the child has escaped into the abdominal cavity immediate laparatomy is indi-

cated. After the child had been delivered two methods of procedure are recommended by authority. One is the closing of the tear by packing with iodoform wicking and drainage of the parts with gauze. The other, which in complete ruptures is often more popular, is to do a laparatomy, cleansing the peritoneal cavity. In suitable cases close the tear by the Sänger method. If the tears are very extensive and there is a strong probability of uterine infection, a Porro operation or complete hysterectomy is the best method. The preventive method consists in the early relief of difficult labor by suitable operative interference instituted before the uterus has become very thin and damaged by long continued pressure between the presenting part and the bones of the pelvis.

Dr. X. O. Werder, of Pittsburg, read a paper on

TONIC AND SPASMODIC INTESTINAL CONTRACTIONS, WITH REPORT OF CASES,

in which he reviewed five cases, one by Dr. Murphy, two by Dr. Long, and two of his own, reported by Dr. Long at the Richmond, Va., meeting of the association and adds some additional cases of a similar condition that he has observed subsequently. He referred to cases reported by L. Heidenhain and applied the term enterospasm, dividing the cases according to their nature and severity into spasmodic and tonic or tetanic forms. He considers that they are preversions of normal peristalsis, due to a reflex chemical irritation exerted at the seat of contraction (either on the mucous or serous surfaces of the bowel) or elsewhere in the alimentary canal or abdomen and shows that they assume surgical importance when, in the spasmodic varieties, they simulate neoplasms, as in three cases of that variety reported ; or when they cause obstruction to the fecal current, becoming true cases of dynamic ileus, as in the five cases above referred to. Regarding the accuracy of diagnosis in these cases there can be but little doubt. Dr. Long's cases had undoubted symptoms of intestinal obstruction that varied in intensity over quite a long period. Operation revealed firm contractions of bowel. Careful search failed to show any other cause for the symptoms. Dr. Murphy's case, previously treated for several attacks of lead colic, operated on for intestinal obstruction of several days' duration, nothing was found but firm contraction of bowel. It relaxed after exposure to air. Three hours later spontaneous bowel movements occurred. Dr. Werder's first case gave history of previous attacks following ingestion of

articles of diet made of milk. Simple salpingo-oöphorectomy for simple sarcoma. Clean case. Excellent condition for first six days. Onset of attack sudden and followed ingestion of egg-nogg by an hour or so. Symptoms of partial intestinal obstruction that later became complete, plus depressing defects of some toxic agents, were noted. Especial attention was called to two rational but misleading symptoms—namely, the occasional expulsion of gas for first three days, (that is, till patient was in collapse two days before death,) and an abdomen that was soft, flat and not tense or tender. Violent peristalsis persisted till death. Autopsy four hours later showed peritoneum everywhere glistening, normal. Pedicle covered by normal endothelium. No adhesion; no exudate; nothing abnormal could be found, except firm contraction of lower 55cm. of ileum and whole large intestine, and sacculation of section of bowel next above it. Cause of contraction attributed, as a probability, to tyrotoxicon absorption; death of patient, to intensified absorption of tyrotoxicon and other toxins forcibly retained in bowel. His second case followed vaginal hysterectomy for small fibroid. Symptoms of obstruction began earlier and were more pronounced than in the preceding case. Peristalsis persisted till death at the end of the fourth day. Autopsy two hours later showed sigmoid and ileum adherent to vaginal vault for an extent of three inches. All peritoneum visible from above was normal in appearance. No exudate. Bowel extending from seat of adhesion of ileum to valve and from adhesion of sigmoid to anus, firmly contracted. Sacculated bowel above. Plastic lymph at seat of adhesions and at the parts exposed to vaginal gauze and clamps. Two cc. of fluid found there. No pus visible to naked eye. No microscopic examination. Cause of contraction, chemical and mechanical irritation applied to serous surface; cause of death, possibility of mild sepsis combined with absorption of toxin from intestinal canal.

Of the spasmodic variety, the first case showed a sausage-shaped mass, three inches long and one inch thick at pylorus, with limited mobility and mapped out at each examination by several careful observers—not present when under ether and abdomen cleansed. Abdomen opened, pylorus and duodenum delivered; looked and felt normal. On manipulation they contracted firmly and were as hard as a finger, but only to relax in two or three minutes. This was repeated several times in full view of all present. In second case, contraction found accidentally when doing a suspensio-uteri. In third and fourth cases consulted for presence of tumor. Found

firm contractions of bowel near umbilicus that resembled a neoplasm. They relaxed and contracted again several times during an examination that lasted fifteen or twenty minutes, always reappearing at the same place. Condition recognised and operation advised against. These patients were all neurotic and complained of quivering and commotion at seat of trouble, as well as of dyspepsia and obstinate constipation.

DYNAMIC ILEUS FOLLOWING OPERATIONS INVOLVING THE ABDOMINAL CAVITY, WITH REMARKS ON ADYNAMIC ILEUS.

By Dr. FREDERICK BLUME, of Allegheny, Pa. (Published in full, see page 161.)

THIRD DAY—AFTERNOON SESSION.

Dr. ALBERT GOLDSPOHN, of Chicago, contributed a paper on

THE FATE OF OVARIES IN CONNECTION WITH RETROVERSION AND RETROFLEXION OF THE UTERUS.

He drew the following conclusions: (1) in all cases of retroversion and retroflexion of the uterus a knowledge of the ovaries as to their location, mobility and general physical condition should comprise an essential part in the diagnosis, as determining largely the nature and urgency of the treatment; (2) the welfare of ovaries, in general, demands such a degree of anterior inclination of the longitudinal axis of the uterus as will enable intraäbdominal pressure to bear upon the posterior surface of the organ and thereby to act in unison with its other supports to retain it and its adnexa in normal position and function; (3) inasmuch as in the female pelvis, as well as elsewhere in the human body, the natural and considerable abilities of healthy tissues to defend themselves against microbic invasion (infection) are lowered or annuled in direct proportion to any degree of mechanical embarrassment of the venous circulation in the tissues or organs, it behooves gynecologists especially to be alert in recognising and correcting all material anomalies in place or posture of the female generative organs or in securing to them their normal freedom.

Dr. WALTER B. DORSETT, of St. Louis, Mo., read a paper entitled

THE ADMINISTRATION OF PHOSPHATE OF STRYCHNIA DURING GESTATION.

The following observations have been made by him in the use of this drug during the gestation of weak and debilitated patients:

A good appetite and good assimilation are obtained in the general weakness and debility of the anemic. Constipation is relieved, the patient is built up and placed in a good condition to pass through the ordeal of labor. The uterus contracts promptly after the third stage of labor, and the use of ergot is entirely dispensed with. If he finds it necessary to use the forceps, the patient is given a hypodermic injection of 1-30 grain sulphate or phosphate of strychnia as soon as the anesthetic is commenced, but no ergot is ever used. After the continuous use of the phosphate of strychnia, the uterus contracts promptly after the second stage of labor and in many cases the application of Credé's method of expression of the placenta is not needed to bring it away and no postpartum hemorrhages have occurred. The frequently observed chilliness or rigors, which in the majority of cases follow labor, has been noticed in but few cases. He has used strychnia for some time in his abdominal surgery, for the purpose of preventing shock and to control the pulse in the operations, and in this way was led to its use in obstetrics. As phosphorus and strychnia are remedies used in the treatment of rachitis with good results, would it not be the remedy during the gestation of the rachitic fetus ?

The remainder of this session was devoted to the exhibition of pathologic specimens, with histories and photographs of the same. Specimens were presented and the histories of cases related by Drs. Vander Veer, Dorsett, Macdonald, Ross, McMurtry, Chase, Smith, Hughes and others.

Fourth Day—Morning Session.

Dr. Geo. S. Peck, of Youngstown, Ohio, read a paper in which he reported

FIFTY-TWO CASES ILLUSTRATING HIS PERSONAL EXPERIENCE WITH THE MEDICAL AND SURGICAL TREATMENT OF APPENDICITIS.

He said there were four cardinal symptoms which will almost invariably insure a correct diagnosis, if they occur in the order given : (1) sudden severe pain in the abdomen, generally of a colicky nature, located in any part or extending over the entire abdomen ; (2) always nausea and frequently vomiting ; (3) increased temperature ; (4) localised tenderness in the right iliac region. Some patients will have diarrhea, while others may be constipated. He had never failed to make a correct diagnosis when the four cardinal symptoms were present.

Treatment.—Surgeons differ in their methods of operating. Some advise in the acute suppurative form simple incision and evacuation of pus. If the appendix cannot be easily found it should be left drained and packed and then, in the interval between attacks, the appendix should be removed, always provided one can get the consent of the patient, which the speaker has found to be difficult. A few surgeons advise the liberation of all adhesions and the removal of the appendix in all cases of acute suppurative appendicitis and have reported good results. He believes it is the duty of every surgeon to make a complete operation in the vast majority of cases and thinks that the time is not far distant when surgeons will advise the breaking up of all adhesions, the removal of every diseased appendix, the closing of the incision as is now done in the operation for pyosalpinx, as advised by Morris, Price and McMurtry. In his last three cases he has followed this method and the results have been far beyond his expectations. Two of the cases were discharged in three and one in four weeks.

Dr. Lewis S. McMurtry, of Louisville, Ky., followed with a paper entitled

THE OPERATION ITSELF IN APPENDICITIS.

He considered the subject under the following headings : (1) the incision ; (2) dealing with adhesions and with abscesses ; (3) removal of the appendix ; (4) drainage and isolation of the peritoneum by gauze.

Concerning the incision three important considerations must be observed : (1) to obtain easy access to the caput coli with sufficient working space ; (2) to secure all natural advantages to facilitate drainage ; (3) to do the least damage possible to the parietal structures incised, in order that firm union may be secured and hernia thereby prevented. The early operations for appendicitis were mostly in extreme cases wherein suppuration had obtained and in cutting down into an abscess and evacuation and draining the same. For this purpose the vertical incision was adopted and is yet practised by many surgeons. This incision does not, however, give as easy access to the appendix and to the outer and posterior areas adjacent thereto, which are so frequently involved, as does the oblique incision. A method of dividing the abdominal wall by a combination of incision and blunt dissection has been described by McBurney and commended by many writers on the surgery of the appendix. The incision was described at length.

Dealing with adhesions and abscesses.—In dealing with adhesions and abscesses the same general rules of surgical treatment should be observed in appendicitis as in similar conditions affecting other organs enclosed within the peritoneum. Whenever practicable, adhesions should be separated, abscesses emptied, disintegrated structures composing foci of infection removed and cleansing and drainage secured by measures of assured efficiency.

Removal of the appendix.—In his early operations he ligated the appendix with the meso-appendix, using fine sterilised silk, cut away the appendix and applied pure carbolic acid to the stump. Later he adopted the modern method of transfixing the meso-appendix at its base, cutting it away, stripping back a cuff of peritoneum from the appendix down to its junction with the cecum, ligating the appendix with fine silk and cutting it away, sterilising the stump, invaginating the stump into the cecum and covering with peritoneum by careful stitching after the Lembert method. Nothing in the progress of healing or in ultimate results indicated any advantage of the latter method over the former simple ligature, excision and cauterisation.

Finally, Dr. McMurtry discussed drainage and isolation of the peritoneum by gauze.

Dr. Thomas J. Maxwell, of Keokuk, Iowa, contributed a paper on Senile Irritable Uterus. In three cases he was unable to relieve this condition by tentative treatment and finally resorted to hysterectomy with complete success in all of them.

The election of officers resulted as follows :

President, Dr. Charles A. L. Reed, of Cincinnati, Ohio ; vice-presidents, Dr. Richard Douglas, Nashville, Tenn., and Dr. Walter B. Dorsett, St. Louis, Mo. ; secretary, Dr. Wm. Warren Potter, of Buffalo, N. Y.; treasurer, Dr. X. O. Werder, of Pittsburg, Pa. Place of meeting, Pittsburg, Pa., September 20, 21 and 22, 1898.

After introducing and adopting resolutions of thanks for courtesies extended, the association adjourned.

Typhoid Fever.—Keep the patient in bed until, for an entire week, the temperature has been normal. Keep him on a sterilised liquid diet as long as he remains in bed. At the beginning of the disease give ten grains of calomel on alternate days and also give one grain of carbolic acid and three drops of tincture of iodine every four hours during the entire illness.—*Medical Record.*

BUFFALO MEDICAL JOURNAL.

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THE AUTUMN SOCIETY MEETINGS.

THE series of medical society meetings scheduled for the autumn of 1897 is well under way and presents some features of unusual interest that command sufficient attention to justify comment at this time. The list was led by the American Association of Obstetricians and Gynecologists, that held its meeting at Niagara Falls, August 17–20, 1897, upon which editorial comment in detail was made in the September issue of the JOURNAL. This body held its meeting earlier than common this year for the purpose of enabling its members to enjoy the scenery at Niagara while it was at its best. We publish in this edition two excellent papers read at this meeting, as well as a synopsis of the proceedings, to which we invite the attention of our readers—all of which will, we believe, prove profitable reading.

Following close upon this meeting came that of the Twelfth International Congress, held at Moscow, August 19–26, 1897. Contrary to predictions in some quarters this congress appears to have been greatly successful from numerical, scientific and social viewpoints. About 100 Americans were present and Continental Europe was generously represented. Dr. J. B. Murphy, of Chicago, commanded the attention of the congress in the presentation of his work upon the anastomosis of arteries. This proved to be one of the most attractive features of the congress. The entertainments were keyed on a high pitch, ranging all the way from free railway passes to imperial hospitality. A number of the members of the congress were quartered at the Kremlin—a special courtesy accorded by the Czar of all the Russias. The *Medical Record* has published a full cable synopsis of the proceedings, which is a

marked instance of journalistic enterprise as well as lavish expenditure. The congress will hold its next meeting at Paris in 1900.

The next organisation to hold forth was the British Medical Association, which held its sixty-fifth annual meeting at Montreal, August 31 to September 3, 1897, this being the first time in its history that it ever met outside of Great Britain. The attendance from the United States was about 300 invited guests, which was nearly one-half the aggregate number registered. Dr. T. G. Roddick, of Montreal, was the president, and it was largely through his efforts that the association came to Canada this year. The scientific work of the association does not appear to have been of the highest order —even the addresses were somewhat mediocre in character, if we except those of W. Japp Sinclair and Hermann M. Biggs. The distinguishing feature of the meeting was the presence of Lord Lister, whose genial good-nature and versatile talent made him the popular guest of honor at numerous social functions, one of which was given at Toronto on the evening of August 21, 1897. The medical profession there united in tendering a dinner to his lordship at the Toronto Club. Through the courtesy of the committee in charge a number of Americans were privileged to attend—an opportunity that was greatly appreciated by the guests from this side of the line. The becoming modesty with which Lord Lister on all occasions bore his blushing honors was the subject of general remark in approbation. The visit of Sir Joseph Lister to this country will long be remembered as one of the brightest professional epochs and it will serve to keep the Montreal meeting of the British Medical Association ever green in memory.

Turning now to the meetings to come we note that the Mississippi Valley Medical Association is announced to hold its annual meeting at Louisville, October 5–8, 1897. Efforts are making by the officers, with Dr. Thomas Hunt Stucky as president, and particularly by the committee of arrangements, to make this an especially interesting occasion. The railways have granted reduced rates, a large program containing many interesting titles by distinguished men is offered and the well-known hospitality of the city of Louisville, all conspire to justify the prediction made by the officers that this will be one of the most interesting medical meetings of the autumn season.

The Tri-state Medical Association—Alabama, Georgia and Tennessee—will hold its annual meeting at Nashville, October 12–14, 1897. The presiding officer, Dr. W. F. Westmoreland, of

Atlanta, is doing excellent work in organising this meeting, in which he is ably seconded by the secretary, Dr. Frank Trester Smith. The preliminary program, already issued, bespeaks an occasion of great scientific interest. It must not be forgotten that the Tennessee Centennial Exposition is now in progress at Nashville.

The Central New York Medical Association, to be presided over by Dr. Edward B. Angell, of Rochester, will convene at Buffalo, October 19, 1897. Dr. Angell is well known to the readers of the JOURNAL and his enthusiastic interest in the welfare of the association will contribute to the success of this meeting. The profession of Western New York is cordially invited to attend. Dr. William C. Krauss, chairman of the committee of arrangements, states that he is assured that the attendance will be unusually large this year, that the program will be an interesting one and the meeting more than ordinarily successful.

The American Public Health Association will hold its twenty-fifth annual meeting at Philadelphia, October 26–29, 1897, under the presidency of Dr. Henry B. Horlbeck, of Charleston, S. C. The secretary, Dr. Irving A. Watson, of Concord, is busy with the affairs of the association and anticipates an unusually large gathering. The chairman of the committee of arrangements, Dr. Benjamin Lee, who is also secretary of the Pennsylvania state board of health, has made unusual preparations for both the social and scientific features of the meeting.

The Southern Surgical and Gynecological Association announces that its tenth annual meeting will be held at St. Louis, November 9, 10 and 11, 1897. This enterprising and progressive organisation includes some of the best medical talent of the South and always has instructive sessions characterised by scientific papers and spirited debates. The secretary, Dr. W. E. B. Davis, of Birmingham, who organised this association, is one of the most experienced medical society officials of the country as well as one of the most distinguished abdominal surgeons in the South. It is perfectly apparent that under his experienced management the forthcoming meeting of the association, to be presided over by Dr. George Ben Johnston, of Richmond, will be fully abreast of any previous meeting in the history of the organisation. Dr. Johnston's reputation, too, is national and his ability as a presiding officer is unexceled. The city of St. Louis is delightful during the Indian summer and everything seems to be conspiring in the interests of this meeting.

From the foregoing it will appear that there is a revival of interest in medical society affairs that bespeaks of the prosperity of the country in a most emphatic manner. When physicians attend medical societies in largely increasing numbers it is an index of financial ease that reflects beneficially upon other interests and occupations. Surely the effect of these autumn meetings will be advantageous to the general business interests of the country as well as to the physicians who attend them.

YELLOW FEVER IN THE SOUTH.

IT IS about a month since the first cases of yellow fever appeared at Ocean Springs, Miss. Since that time the disease has spread to New Orleans and Mobile, and four cases, real or suspected, have been reported as far north as Cairo, Ill. Up to the present writing (September 24th) about 250 cases of genuine yellow fever have been officially reported at the office of the surgeon-general of the marine hospital service at Washington. It is estimated that about 100 suspected cases have fallen under the cognisance of the local health boards principally in the states of Alabama, Mississippi and Louisiana.

While the aggregate number of cases appears somewhat formidable and the recent spreading of the infection appears to have excited apprehension in the localities invaded, it is gratifying to know that the number of deaths announced is estimated at less than 5 per cent. of the whole number treated. Moreover, it is probable that the death-rate will diminish rather than increase under the influence of cooler weather, that has prevailed during the past week. As the season of frost approaches, too, apprehension will be lessened and confidence will be established. As compared with the epidemic in Florida in 1888, when the percentage of deaths was more than double the present invasion, and as further compared with earlier epidemics during which the mortality was at least 20 per cent. of the whole number of cases, the present outbreak may be regarded as phenomenally mild. This speaks well for the sanitary regulations enforced by the general and local governments.

While, therefore, it is gratifying to contemplate that great loss of life is not to be feared from the present epidemic, it cannot be denied that the business interests of the south are suffering to a considerable degree, resultant from the necessary interference with

traffic and commerce and the establishment of rigid quarantine regulations. Furthermore, the suspicion cannot be resisted that the state boards of health in the Gulf region have not been as vigilant in preventing the entrance of persons suffering from yellow fever into their borders as they should have been. Let us hope that the lesson taught will be a profitable one in the future.

Personal.

Dr. L. A. Weigel, of Rochester, has established an office at 199 Franklin street, Buffalo, where he can be consulted on Wednesdays only in relation to orthopedic surgery, to which practice he devotes his exclusive attention. Consultation hours, 10 to 1. Telephone, Seneca 287.

Dr. William G. Bissell, bacteriologist to the department of health and lately assistant surgeon 74th Regiment, N. G. N. Y., has been promoted to be surgeon of that regiment. It is wise for the National Guard to retain the services of such efficient officers as Dr. Bissell and to promote them whenever vacancies exist.

Dr. Roswell Park, of Buffalo, who is convalescent from a prolonged illness, sailed for the Mediterranean, September 25, 1897. He was accompanied by Mrs. Park, and expects to be absent about three months, when he will return and resume his professional and college work.

Obituary.

Dr. John Braxton Hicks, F. R. C. P., F. R. S., died at his residence, in Lymington, England, August 28, 1897, aged 72 years. The name of Braxton Hicks has been familiar to the readers of the literature of obstetrics for more than thirty years. He was appointed assistant obstetric physician at Guy's Hospital in 1865, obstetric physician in 1870, and consulting obstetric physician in 1882. He was an honorary fellow of obstetric societies in Great Britain, Germany and the United States. He retired from practice about three years ago. No more appropriate eulogium can be pronounced at this time than that contained in Dr. Wenning's article, published in this edition, in which he frequently alludes to "Braxton Hicks's method."

Dr. George W. Lewis, one of the oldest and best known homeopathic physicians in Buffalo, died August 30, 1897, aged 70 years. Dr. Lewis was a brother of Judge Loran L. Lewis, of this city, and he is survived by two sons, Dr. Geo. W. Lewis, Jr., and Edward E. Lewis. Dr. Lewis had been a prominent practitioner of medicine in Buffalo for many years, was a member of the several homeopathic medical societies—county, state and national—and was attending physician at the Buffalo Homeopathic Hospital.

Medical College Notes.

Buffalo University Medical College opened its regular session on Monday, September 13, 1897. Dr. Montgomery A. Crockett delivered the introductory lecture and the assembled students gave an enthusiastic reception to Dr. Roswell Park upon that his first appearance amongst them since his recovery.

Niagara University Medical College inaugurated its scholastic year on Tuesday, September 28, 1897. Drs. Cronyn and Lothrop made addresses introductory to the course in the absence of Dr. Buswell, who had been appointed to deliver the opening lecture. The laboratories of this college have been reconstructed and newly equipped with modern appliances of the most approved order and a prosperous year is indicated.

Society Meetings.

The Buffalo Academy of Medicine held meetings during the month of September as follows:

Section on Medicine.—Tuesday evening. September 14th, program: Medico-legal aspects of cases of poisoning; with especial reference to restriction of sale of poisons, by Dr. A. L. Benedict and Hon. Arthur W. Hickman.

Section on Pathology.—Tuesday evening, September 21, program: Some observations on the physiology of the stomach; Report of X-ray exhibition, by Dr. A. L. Benedict; Abnormal cell development in plants and animals:

a study in comparative pathology, by Miss Mary Forster, Newnham College, Eng.

Section on Medicine.—Tuesday evening, September 28th, program: Tuberculosis, by Dr. Wm. H. Bergtold, professor of pathology, University of Denver, Colorado; discussion to be opened by Drs. F. J. Thornbury and S. S. Greene.

The American Academy of Railway Surgeons will hold its fourth annual meeting at the Auditorium Hotel, Chicago, Wednesday, Thursday and Friday, October 6, 7 and 8, 1897, under the presidency of Dr. L. E. Leman, of Denver. The preliminary program lately issued contains an interesting list of papers and discussions. Among those announced to participate are Drs. E. M. Dooley and C. M. Daniels, of Buffalo.

The New York State Association of Railway Surgeons will hold its seventh annual meeting at the Academy of Medicine, New York City, on Tuesday, November 16, 1897, under the presidency of Dr. J. Frank Valentine, chief surgeon of the Long Island Railway.

The American Electro-therapeutic Association met at Harrisburg, September 21, 22 and 23, 1897. Dr. L. A. Weigel, of Rochester, read a paper upon Electricity in orthopedic practice. Dr. Charles B. Dickson, of Toronto, was elected president for the ensuing year and the next meeting was appointed to be held at Buffalo.

The Roswell Park Medical Club held its annual meeting at the office of Dr. Thomas Bagley, 1344 West avenue, Buffalo, on Monday evening, September 13, 1897. The following-named officers were elected for the ensuing year: president, Dr. William Meisburger; vice-president, secretary and treasurer, Dr. William Dignen. After the business was transacted Dr. Bagley entertained the club.

The Medical Association of Central New York will hold its thirtieth annual meeting at the Ellicott Club, Buffalo, N. Y., Tuesday, October 19, 1897. A preliminary program of the papers will soon be published, hence those who desire to read should send titles to the secretary at once. The Transactions of this society are

published by the JOURNAL and all papers read must be contributed exclusively to it, if it is desired to have them appear in the Transactions.

The association will hold a morning session from 10 to 1 and an afternoon session from 2 to 6 o'clock.

Those who desire to join should obtain delegate papers from the president and secretary of the Medical Society of the County of Erie and present them to the secretary of the association, Dr. C. A. Vander Beek, 113 North street, Rochester, N. Y.

Book Reviews.

APPENDICITIS AND ITS SURGICAL TREATMENT, with a Report of Seventy-five Operated Cases. By HERMAN MYNTER, M. D. (Copenhagen), Professor of Operative and Clinical Surgery in Niagara University and Surgeon to the Sisters of Charity Hospital in Buffalo, N. Y. Octavo, pp. 303. Philadelphia: J. B. Lippincott Co. 1897.

So much has been written on the subject of appendicitis and it has been discussed so frequently in medical societies that it would seem as though all technical questions relating to its pathology, diagnosis and treatment must have been definitely settled by this time. Not so, however, nor is it likely that they will be determined during this day and generation. The conditions under which the disease manifests itself are so various, oftentimes so subtle and always so dangerous, that it is doubtful if definite lines of procedure can be agreed upon to meet all cases.

In the work before us we recognise the first attempt to cover, by a single treatise, the entire field occupied by appendicitis in its different phases. Professor Mynter leads off with a historical introduction that exhibits research and presents interesting data. While cases have been reported since 1759 (Mestivier), in which the appendix has been the offending cause of pus formations, it was not until 1888 (Sands) that a successful case of abdominal section, made during the first forty-eight hours of the malady, was reported. Most of the work between these two dates is merely a record of accident, conjecture, doubt and generally failure. During all this period it had generally been regarded as a medical disease and surgery was only resorted to when, late in the malady, pus formations were diagnosticated.

The first definite surgical discussion on appendicitis was held at the annual meeting of the medical society of the state of New York in February, 1891, at which time, as Mynter justly remarks, the surgical treatment suddenly came to the front. From this time forward there has been an increasing disposition on the part of those best informed to classify it as a surgical disease.

Mynter devotes a brief description to the anatomy of the appendix and its relations to the surrounding organs. He shows that it is an organ of unknown function, variable in length, breadth and thickness ; of inconstant position and of changeable relationship. Histologically its structure is much like that of the cecum, though rich in lymphoid cells, with two muscular coats and an ample vascular supply.

Under the head of etiology, Mynter proceeds to consider in consecutive order and with much attention to detail the various causes that may lead up to appendicitis. He makes two general heads, predisposing and exciting, under each of which he makes six subheads and discusses each with intelligence and precision. Contrary to the now generally received opinion he finds foreign bodies, such as cherry-stones, grape-seeds and the like, frequent exciting causes of appendicitis. Coprolites, a comprehensive and classic term for fecal concretions, are found, says Mynter, much more frequently than foreign bodies. They do not enter from the cecum, but are formed in the appendix itself and do not consist of feces except perhaps in the center, but of inspissated mucus and different salts colored with fecal matter. These concretions are recognised by surgeons as the most frequent causes of appendicitis and have in earlier times often been mistaken we believe for fruit seeds and stones, the heretofore traditional cause of appendicitis.

In the section devoted to pathology, Mynter groups some interesting facts. He shows how it was formerly the fashion to attribute deaths to inflammation of the bowels and peritonitis that were really caused by appendicitis. Every physician in medical practice in the anteoperative period is familiar with this fact. Even in Boston, according to Mynter, quoting from Richardson, between 1880 and 1884 inclusive, *i. e.*, before the operative period for appendicitis, 218 young men died from inflammation of the bowels, of which probably 194 were due to perforating appendicitis. During the same period 168 men and 155 women died of peritonitis at Copenhagen, which indicates—presuming that these were chiefly cases of appendicitis—that the disease is quite as prevalent abroad as in America, a view contrary to the generally accepted belief. Mynter continues the pathological discussion of the subject under the usual heads of ulcerative, perforative, infectious and gangrenous appendicitis, giving the views of some of the ablest pathologists on the various phases of the subject.

Under the head of symptomatology, our author gives a consecutive clinical picture of almost every manifestation of the malady. One of the most subtle and dangerous forms of appendicitis is that which develops without initial acute symptoms, and which steadily leads up to the point of danger while the victim is still walking about and even performing his daily duties. To persuade such a person to calmly lie down and have his abdomen opened on the supposition that he has an appendicitis, that only such an operation will cure, is not an easy thing to accomplish. Nevertheless, this

has occasionally succeeded in saving a human life in patients intelligent enough to listen to scientific advice.

The complications and sequelæ of appendicitis furnish opportunity for skilful surgical knowledge and resourceful therapeusis. These questions are briefly but intelligently considered in this treatise. Under the head of diagnosis Mynter shows a completeness that is helpful. Nevertheless, there is always something in this subdivision that is wanting and doubtless always will remain so. Experienced surgeons are now generally agreed upon the propriety of operation as soon as diagnosis can be made; they also agree that there are some cases in which diagnosis is shrouded in mystery and at best must be doubtful. We believe in such cases it is usually better to operate than to delay, for an aseptic incision made by a skilful surgeon is less dangerous than an unknown quantity lurking within the abdomen masked by a group of ill-defined symptoms.

Under prognosis Mynter reaffirms a surgical aphorism that it is doubtful in acute cases, as well as more unfavorable, the longer the operation is postponed. Under this head our author contrasts the difference between medical and surgical treatment and draws a picture less favorable to the former and increasingly favorable to the latter. As a matter of fact among the best informed medical men appendicitis has ceased to be regarded as a medical disease. The attending physician should, therefore, be prepared to operate at once, or summon a competent surgeon to do the work for him. Since death results in the main from gangrene, perforation or diffuse peritonitis, it follows that if operation can anticipate these grave consecutive conditions it will prove successful in the large majority of instances. There is no disease whose course is run more rapidly than appendicitis and the watchword should ever be—Time!

Under the head of treatment Mynter considers that in vogue in the several countries of Europe and America, quoting many of the leading operators on both sides of the ocean. He contrasts medical and surgical treatment in interesting juxtaposition and in his conclusions gives an intelligent consensus of the best surgical judgment of the day. He gives a résumé of his own statistics based on seventy-five operations personally conducted at the Sisters of Charity Hospital, and publishes the detailed history of these cases in part II. of the volume. These statistics end January 1, 1897, since which time, he informs the writer, he has operated on forty-seven cases in the same hospital, which affords an ample experience and entitles him to speak with authority.

This monograph was prepared to be submitted to Professor Mynter's Alma Mater, the University of Copenhagen, on which the degree of Doctor of Medicine was granted last July, twenty-six years after his graduation, an honor that carries dignity and has a meaning.

In conclusion, we feel justified in congratulating Professor Mynter on the preparation of such an intelligent and systematic treatise upon this important malady, one perhaps that interests the community more than any other at the present time. In this book will be found the opinions of many of the ablest surgeons in condensed form, with full references to the original text quoted. We miss, however, reference to a comprehensive discussion on the subject by the American Association of Obstetricians and Gynecologists, held at Toronto, September 19, 1894, which has been quoted on both sides of the Atlantic. As a final thought we may remark that this work of Mynter's is the most comprehensive treatise upon appendicitis yet published and it at once becomes a necessity for the student of the subject, whether he be physician, surgeon or teacher. The publishers have presented the book in attractive form.

THE DISORDERS OF DIGESTION IN INFANCY AND CHILDHOOD. By W. SOLTAU FENWICK, M. D., B. S., London, Member of the Royal College of Physicians, etc. Illustrated. Philadelphia: J. B. Lippincott Company. 1897.

The author has based his conclusions as presented in this book chiefly on his experience in the Evelina Hospital, where some 5,000 cases of digestive disturbance have passed under his observation.

Considerable investigation has been undertaken by the author, the most interesting of which is his work in the analysis of the stomach contents in various disorders of digestion in infancy. A number of original drawings and microphotographs illustrate his findings in morbid anatomy. While some work in the bacteriology of summer diarrhea was done by the author, which he supplements by quoting from others, the more recent and thorough research in this field by Booker makes the small space devoted to this of little value.

In the matter of treatment the book is in the main satisfactory, though not so in regard to the diet of infancy. Those familiar with the work of Rotch, Holt and others will not read the chapter on dietetics a second time. The author himself acknowledges the more progressive attitude of American and continental pediatrists in this respect.

The book is not as complete in some features as one feels that the author's experience might have made it, yet it contains much which the practitioner will find helpful and suggestive.

M. J. F.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK for the year 1897. FREDERIC C. CURTIS, M. D., Secretary. Philadelphia: William J. Dornan, Printer. 1897.

This handsome volume of 584 pages is a record of the proceedings of one of the strongest and best organised state medical

societies in the Union. We do not say this because we are of New York, but we are familiar with most of the societies, have access to their Transactions and believe we have stated a fact that will endure the test of comparison. This society is a delegate body, and while on its face its membership seems comparatively small it represents about 6,000 doctors. Its annual volumes contain the best thought of some of the most prominent members of the medical profession in the state and are eagerly sought as authoritative expositions of many important medical and surgical subjects. The book before us contains forty-six titles, besides the record of the proceedings, obituaries and lists of members in the various county medical societies. One of the most interesting as well as important, subjects discussed was on the Relation of impure water to disease and the cure and prevention of the latter. This embraces some twelve titles and includes almost every phase of the question at issue. Sanitarians and public health officers ought to obtain this volume, as it contains the latest and best literature relating to water contamination, the diseases resultant therefrom and the best methods of prevention.

The secretary has displayed great skill in the preparation of the volume, which involves an enormous amount of careful work.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA. Forty-third Annual Meeting, held at Winston-Salem, N. C., May 12, 13 and 14, 1897. Wilmington: LeGwin Bros., Printers and Binders. 1896.

This society always has interesting meetings and its scientific work is of excellent quality, but it hardly does itself justice in publishing its transactions in the present form. The paper is poor and the letter-press inferior. It is, however, better to print in this way than not at all, for medical society work unpublished is lost. We look forward to the time when this sterling society will issue a volume second to none, for the *esprit de corps* of the profession in the old north state is well maintained and its work deserves preservation in form equal to the best. We cannot forget the stand taken by this society in regard to state examination for license and the high order of discipline its examining board maintains. The state board of health of North Carolina, too, is an efficient body that was created at the instance of this society. Both of these boards report to the state society, and their proceedings will be found printed in this volume.

A SYSTEM OF PRACTICAL THERAPEUTICS. By Eminent Authors. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Volume IV. Octavo, 1,065 pages, with illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

The popularity of the system of therapeutics edited by Professor Hare, that appeared about five years ago, has been widely

attested. It is doubtful if any more valuable work on allied subjects has ever been printed in the English language.

The object of this volume is to bring the system forward to the present day. That it has covered the advances made in the interval is apparent upon careful examination. The contributors have been selected with judgment and the editor has performed his part judiciously. Professor Hare, himself, contributes articles on influenza, scarlet fever and measles, diabetes mellitus, and the intestinal parasites. His skill in the treatment of diseases pertaining to the department of internal medicine is well known, as a teacher he has but few equals, and as an author he is unsurpassed in the field of therapeutics.

Physicians who obtained the first volume of the series will be certain to possess this one, as it is a complement to the others and a necessary counterpart where completeness and advanced thought are desired.

A Handbook of Medical Climatology, Embodying Its Principles and Therapeutic Application, with Scientific Data of the Chief Health Resorts of the World. By S. Edwin Solly, M. D , M. R. C. S., late President of the American Climatological Association. In one 8vo volume of 470 pages, with engravings and colored plates. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

It is becoming a recognised fact among scientific physicians that climate, quite as much as drugs, plays an important part in the treatment of many diseases. The aim of this work is to reduce climatology to a scientific basis as a therapeutic agent. Dr. Solly has done his work in a painstaking manner and has availed himself of government observations in reducing it to a scientific basis. The relief maps are an artistic study and the whole execution of the work is admirable. It gives a description of the principal health resorts, furnishes an analysis of their waters in many instances and supplies meteorological tables wherever essential. As a first attempt to treat the subject scientifically it is to be commended and is a volume that will easily find its way into the hands of every physician whose province is to prescribe a change of climate on an intelligent basis.

BOOKS RECEIVED.

Tuberculosis of the Genito-Urinary Organs, Male and Female. By N. Senn, M. D., LL. D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief, St. Joseph's Hospital, Chicago. Octavo, pp. vi.–317. Illustrated. Price, $3.00, net. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

The American Academy of Railway Surgeons. Report of the third annual meeting, held at Chicago, Ill., September 23, 24 and 25, 1896. Edited by R. Harvey Reed, M. D., Columbus, O. Chicago: American Medical Association Press. 1897.

Report of the Commissioner of Education for the Year 1895-96. Volume I. Containing Part 1. Washington: Government Printing Office. 1897.

Transactions of the American Gynecological Society. Volume XXII. For the Year 1897. J. Riddle Goffe, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1897.

The Origin of Disease, Especially of Disease Resulting from Intrinsic as Opposed to Extrinsic Causes. With chapters on diagnosis, prognosis and treatment. By Arthur V. Meigs, M. D., Physician to the Pennsylvania Hospital. Octavo, pp. xiv.—229. With 137 original illustrations. Philadelphia: J. B. Lippincott Co. 1897.

The Normal and Pathological Circulation in the Central Nervous System (Myel-Encephalon). Original Studies by William Browning, Ph. B., M. D., Attending Neurologist to the Kings County Hospital and Consulting to the St. Christopher's Hospital for Babies, etc., etc. Small 8vo, pp. 171. Price, $1.50. Philadelphia: J. B. Lippincott Co. 1897.

Transactions of the Medical Society of the State of West Virginia, held at Charleston, May 19, 20 and 21, 1897. Instituted April 10, 1867.

Principles of Medicine. Designed for use as a text-book in medical colleges and for consideration by practitioners generally. By Charles S. Mack, M. D., Professor of Materia Medica and Therapeutics in the Hahnemann Medical College and Hospital, Chicago. Price, $1.00. Chicago: The W. T. Keener Co. 1897.

Atlas and Essentials of Bacteriology. By Professor K. B. Lehmann, Würzburg, and Dr. Rudolf Neumann, Würzburg. Sixty-three chromolithographic plates, comprising 558 separate figures, with explanatory text facing plates, and 128 page treatise, illustrated. Muslin, $3.00, net. New York: William Wood & Co. 1897.

Literary Notes.

The *Western Medical and Surgical Gazette* is the name of a new monthly journal of medicine and surgery established at Denver, Col., the first number of which will bear date October, 1897. It is edited by Drs. William N. Beggs and Lincoln Mussey. Each number will contain seventy-two pages of reading-matter, and a long list of collaborate and department editors is announced. A medical magazine conducted on the lines foreshadowed in the prospectus of this one deserves to succeed and is entitled to the good wishes of its contemporaries.

The *Alabama Medical and Surgical Age* has been removed from Anniston to Birmingham, where it will be conducted at 2107 Third

avenue under the same management as heretofore. The editor, Dr. John C. LeGrand, has established the *Age* on solid grounds and we believe the change of location is wise. Birmingham is one of the most important manufacturing cities in the south and is destined to become a metropolis.

The *Canadian Practitioner*, the *Dominion Medical Monthly* and the *Canadian Journal of Medicine and Surgery*, all published at Toronto, devoted their September editions to publishing the proceedings in abstract of the British Medical Association. Some of the illustrations in these journals are excellent and all their work indicates an enterprising spirit that is to be commended.

Messrs. William Wood & Company, medical publishers, New York, announce the early issue of the following-named books: Text-book of nervous diseases (fourth edition), by Dr. Charles L. Dana; Treatise on gynecology, clinical and operative, by S. Pozzi, M. D., Paris. The latter has been translated and printed under the personal supervision of Dr. Brooks H. Wells, editor of the *American Journal of Obstetrics*.

Dr. Montgomery A. Crockett, of Buffalo, contributed an article on Medical teaching to the September edition of the *Educational Review*. It is at once a critique on the curriculum and the didactic lectures of the present day. Dr. Crockett very justly asserts that we must look to the medical departments of the large universities for the first steps toward improved teaching, since it is only such schools that can offer inducements for the proper preparation of teachers. Dr. Crockett's article will well repay reading to any one interested in the advancement of medical education.

Item.

The American Pediatric Society is making a collective investigation of infantile scurvy, as occurring in North America, and earnestly requests the coöperation of physicians in sending reports of cases whether they have already been published or not. No case will be used in such a way as to interfere with its subsequent publication by the observer. Blanks containing questions to be filled out will be furnished on application to any one of the following-named committee. A final printed report of the investigation will be sent to those furnishing cases. J. P. Crozer Griffith, M. D., chairman, 123 South 18th street, Philadelphia; William D. Booker, M. D., 853 Park avenue, Baltimore; Charles G. Jennings, M. D., 457 Jefferson avenue, Detroit; Augustus Caille, M. D., 753 Madison avenue, New York City; J. Lovett Morse, M. D., 317 Marlboro street, Boston.

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Original Communications.

THE HYGIENE OF THE MIND.[1]

By EDWARD B. ANGELL, M. D., Rochester, N. Y.,
Member of the American Neurological Association; neurologist to the Rochester City Hospital, etc.

WHEN Harvey, by his brilliant discovery of the circulation of the blood, nearly three centuries ago, laid the foundation for investigation upon which modern medicine has reared so noble a structure, medical thought was dominated by the mysticism and supernaturalism of the middle ages.

Since his time, in the study of the human body, patient, scientific observation has supplanted medieval theory. But to the investigation of mental phenomena how halting have we been in the application of the scientific method! Within the memory of practising physicians of today the study of the human mind was relegated to the metaphysician or theologian, whose knowledge was largely speculative or *a priori*.

Today, it is safe to say, it is no longer regarded as evidence of heresy to proclaim that the manifestation of mind depends upon the molecular structure and metabolic activity of the brain; if, indeed, mind be not the function of that organ. The science of mind, then, must take its place with all other sciences and must result from the patient study and classification of its phenomena upon the well-established principles of inductive reasoning.

The study of mind and its manifestation, from the standpoint of the physician, has largely been limited in the past to its perverted action through disease. Our knowledge of the minute

1. President's address at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

anatomy of the brain, of the functional specialisation of certain centers, is so recent and still so incomplete, that the field has been far from attractive and as yet barren of results.

The painstaking investigation of psychological phenomena is today as necessary and useful to the physician as the detailed study of the phenomena of the physical life. And, curiously, the scientific investigation of hypnotism marks the beginning of the application of the scientific method to the study of mind. As Wyllys Taylor[1] well says:

> The significance of the study of hypnotism lies not so much in the fact that this or that person has been benefited by its use, as in the fact that phenomena relating to the mind have at last gained recognition among medical men on precisely the same grounds as phenomena in the physical sphere. A scientific psychology, based on observation, has come to be regarded as a legitimate and practical study for the physician as well as for the special student. The hazy conceptions, so long surrounding all facts of the mental life, are gradually disappearing, and men are beginning to realise that however complex and difficult of apprehension such facts may be, there is at least no scientific heresy in their thorough investigation by such means as we have at our disposal.

However we may regard the vexed question of body and mind, we at least are justified, from every physiological analogy, in assuming that mind manifests itself through brain activity and through brain activity alone. It depends for its highest expression upon a perfectly developed brain in perfect action.

The science of neurology has of recent years done much to advance our knowledge of this relationship. Its anatomical and physiological investigations, as well as its pathological and clinical observations, have contributed largely to a clearer comprehension of the problem. I only need call attention to the advance made in localisation of cerebral action, such as the so-called motor zone and the visual and auditory centers with their connecting tracts. More recently the identification of the neuron as a distinct entity is a triumph of patient investigation and will lead to a clearer understanding of brain processes in time. Furthermore, the evidence we have that muscular activity directly influences the nutrition of its corresponding center in the motor zone is a physiological observation of much importance in the question of brain development. Through proper stimuli other cerebral areas, auditory,

1. Taylor—The Mental Element in the Treatment of Disease, p. 13.

visual or speech centers, can be developed and their connecting tracts made more impressionable.

The first effort of education in the child should be the stimulation and exercise of the various senses. Observation naturally plays an important part and is one of the earliest faculties developed in the growing infant. Maudsley[1] insists strenuously upon the great value of the natural sciences in the early training of the mind, an observation which tallies well with the proved value of the nature studies of the kindergarten. The power of attention, the great disciplinary engine of the mind, is more readily acquired through the study of concrete things. The value of this in mental development I need scarcely mention, for is it not true that the capacity of the individual mind is largely measured by the power of sustained attention?

Undoubtedly muscular activity has a direct effect upon brain development. Not only does it react upon the so-called motor convolutions, but neighboring centers are influenced as well. But the manual training school or mechanical instruction is of more real value than mere gymnastics. Manual dexterity has a definite bearing in stimulating mental coördination. It is further true that physical effort with a definite purpose in view is of more worth to brain development than meaningless muscular activity.

In all educational processes the temperament of the individual must be considered and dealt with accordingly. The sanguine and choleric need less stimulation than the phlegmatic and melancholic.

Education of the young in its truest sense, then, must mean adequate development of the brain, not merely the training of the mind, or the acquisition of knowledge. Without doubt its narrower limitation of meaning is due largely to the fact that education in the past has been under the control of the clerical or metaphysical mind. Education can never become scientific until it is founded upon physiological data; it should have for its aim the full development of the individual; it should be physical, not metaphysical; it should be complete, not partial. If the brain is thus developed, mental action will be normal, the acquisition of knowledge rapid and the judgment well balanced.

Turning now from this broad subject of general education, let us consider that which more directly concerns us as physicians, the preventable causes of mental deterioration. "*Facilis descensus Averni*," wrote the Latin poet. In human development, reversion

1. Maudsley—Responsibility in Mental Disease, p. 301.

to a lower type is as easy. Ages were required for the evolution of the brain of today; generations suffice to reduce it to a condition even lower than that of the ape. Degeneration is our mental hell, self-indulgence its pathway, discipline and education our only mode of escape.

It is not within the scope of this address to discuss the physical defects underlying mental degeneracy. They are well enough known to every student of medicine. It must suffice to call attention to their influence in absolutely limiting mental development. They may be the hidden birth-marks of heredity, the defects of arrested development, the ravages due to organic disease or the toxic influence of alcoholism. Among less common causes of mental obtuseness in children may be mentioned deafness, nasal obstruction, limited patches of meningeal inflammation following infectious diseases and similar specific conditions, which should be remembered when a practitioner is consulted in regard to a backward or refractory child. Peevishness and disobedience in children are often due to mental irritability from maldigestion, appropriate treatment of which is far more efficient as a moral agency than the much-vaunted rod. Even in such instances special treatment or a special mode of education may do much to overcome organic defects in brain organisation.

The influence of bodily health upon mental action is so well known that a discussion of its absolute importance need not detain us. Who has not met the depression, gloom and apprehension due to a perverted liver action? Timidity and panic often are the significant indications of a disturbed innervation of the heart. Less commonly, we note the baneful effects upon the mind wrought by the deficiency of special organic secretions. The idiocy of the cretin, the depravity of the eunuch, the sluggishness of acromegaly are instances in point.

In addition to these cases of mental deficiency, due to defective development, structural change or toxic influences, we recognise a large group of so-called degenerates, unfortunate dwellers on the borderland of insanity, for whose mental salvation much may be done by judicious guidance. The enormous exaltation of self-consciousness, the "subjective ego," is the characteristic perversion of the mental action. Through faulty education and early fostering of self-feeling, the mind becomes unduly sensitive to subjective impressions and ideas. Gradually, mental attention, fixed more and more upon subjective impressions, loses its true

quality—that of determining and directing outgoing impulses in the accomplishment of objective results. The undue exaltation of self-consciousness often is one of the serious results of neurasthenic conditions. Fostered by anxious sympathy of friends, disturbed by strange sensations, self-introspection is enormously developed and mental action is but the automatic by-play of morbidly exaggerated sense impressions. In the management of this type of morbid mind, denial of the existence of such sensations is useless. The principle of diversion of the attention is our strongest resource. Morbid sensations may be replaced by real ones, hurtful sympathy may be repressed and through a constant daily routine of conscious effort, normal mental action reëstablished. In this connection, it is of importance to discriminate between subjective and objective fears. The one rarely causes serious results, the latter often is attended by evil consequences, fear resulting from subjective impressions not doing serious harm and rarely needing contradiction. When this tendency to undue sensory excitability is early recognised in a growing child much may be done to prevent its development by consistent application of these principles.

Another danger to which the mind is subject comes from the predominating influence of a fixed idea. Continued attention to any one line of thought, to one mode of mental activity, may result in enchaining the attention itself. It is important to break the continuity of thought frequently and at least for a brief period to divert the attention into other channels. As an illustration of how strong the tendency of the motor apparatus of the mind is to execute the behests of fixed attention, call to mind the absolute certainty with which a beginner with the bicycle runs against the very obstruction which he would most sedulously avoid. His whole attention is fastened with dread upon the obstacle and the muscles but execute the dominating impulse. Without doubt the awful dread that takes entire possession of the mind of one standing on Niagara's brink many times has inspired the leap which is wrongfully ascribed to suicidal motive.

The hurry of modern civilisation is detrimental to conservation of brain power, the habit of rapid discharge of nerve energy hostile to normal inhibitory control. There is a diminution of the reflective quality of the mind, with resulting undue motor reaction. Under such circumstances the mental vigor can only be preserved by periods of absolute rest and

change of occupation. It is especially in instances of morbid nervous mobility that the dietary plays an important part. Contrast the mild herbivora with the fierce carnivora, or further, consider the taming influence upon wild animals through withholding their meat. Where the nervous mobility is excessive, a non-nitrogenous diet will do much to restore normal mental action.

The value of habit in mental action cannot too strongly be insisted upon. Carpenter's dictum that "each part of the organism tends to form itself in accordance with the mode in which it is habitually exercised"[1] is especially true of the mind. The importance of this continuity of training is well shown in the easy eloquence of the orator, the fluency of the writer, the rapid disposal of vast commercial enterprises by the business man. Through habitual exercise of special faculties and their connecting tracts the action of the mind becomes more automatic and less dependent upon laborious attention.

The more completely the mind can exclude subjective impressions and become objective in its action, the more nearly can it attain to its fullest development. In the degenerative neuroses—hysteria, hypochondria and neuresthenia—we meet with subjective mental action in its most exaggerated form. The sufferer pays little attention to objective effort; his whole mental field is occupied with self-feeling, how much he suffers, what he dreads, often indeed, to the exclusion of the objective measures he must follow to successful recovery. He is ready to converse by the hour upon his fears, the exaggerated physical sensations, he imagines symptoms of incurable maladies and to turn his attention to objective effort is a herculean task. While these two antagonistic phases of mind are found alike in men and women, certainly subjective mental action is far more common among the latter. I venture to assert that this more than any other mental quality distinguishes the sexes. Whether it be due to education, environment or more sensitive nervous organisation, it certainly is true that as society is now constituted the feminine mind is more largely occupied with subjective impressions, feelings and ideas than man's. Her early training, home duties, society relations, all largely tend to heighten subjective attention. A man's whole training is in the direction of objective effort. His mental life deals with realities outside of self. Need we wonder, then, that a vast proportion of victims of these subjective neuroses are women whose mental horizon is so

1. Carpenter, Mental Physiology, p. 344.

largely subjective in character. What bearing this has upon the question of female suffrage and equal ability as well as liability with man, I will leave you to consider. Does it not emphasise, rather, the necessary duality of life, the complemental relations of the masculine and feminine mind?

The moral agencies which work together to fortify the mind are nowhere better expressed than in the beautiful epistle to the Corinthians in which St. Paul commends the Christian virtues "Faith, hope and love, and the greatest of these is love."

Belief, not doubt, leads up to success. Hope, not fear, kindles enthusiastic effort. Love, not hate, enriches and ennobles the human mind.

Suggestion and imitation also have much to do with the development of vicious mental action. Mental degeneration is a reversion to the infantile mind, the formative principle of which is imitation. The operation of these influences is met with among what may be termed "secondary degenerates," individuals whose mental action is largely imitative, not original—"following after strange gods." It is the curious contagion which dominates the mental action of mobs, of communities, of a populace.

Elam, in his interesting work, A Physician's Problem, wisely remarks: "There is a strong tendency for opinion, once promulgated, to run into an epidemic form. No opinion, no delusion is too absurd to assume the collective character."[1] The "imitative instinct," so-called by Hecker in his classical work, On the Epidemics of the Middle Ages, has at different periods of the world's history wrought fearful ravages in the mind of man. In religion, call to mind Peter the Hermit and the Crusaders; in finance, Law's bank and the Mississippi scheme in France; the South Sea bubble in England; Joseph Smith and Mormonism in America; and in our own day, the "silver craze."

This form of collective mentality is properly a matter for state medicine and deeply concerns the welfare of the public. In its prevention we must recognise the importance of legislative action quite as absolutely as we already accept rigidly restrictive laws for the prevention of diseases affecting the body. The influence of detailed publication in the daily prints of sensational cases of crime, of horrible accidents, of vice of every sort, has a deteriorating effect upon the public mind and should be checked by law, backed by public opinion. It is well known in medical jurispru-

1. Elam, page 190.

dence that sensational publicity of an unusual crime is at times followed by a series of crimes similar in character. More than one "Jack the Ripper" was concerned in the horrible mutilations so recently recorded. Within our own borders a late murder was ascribed to the suggestive influence of a newspaper clipping.

Our own state has done a great service to humanity in recognising this evil by prohibiting more than a brief statement of the facts of an electrocution.

It is not the publicity of facts we deplore: it is excitation of the baser emotions and passions of humanity by vivid and sensational distortion of fact we would see repressed. In other directions the state, by law, has checked, or in time will check, influences which weaken the mind and tend to its decay. Through factory and mining laws, through pure food laws, through the repression of intemperance, through proper penalties for crime due to dominating impulse, through the repression of vicious books, performances and brutalising shows, through education in its fullest sense much can be done and must be done for the protection of the defective mind.

Many a so-called crime is due to defective mental action, under the spur of suggestion. Many a criminal now serving out his sentence might justly accuse society of wronging him by ignoring the hygienic needs of the mind as it dare not those of the body. "Thou shalt not steal" has for its corollary, "lead us not into temptation." When we consider the limitations of the ignorant, the moral and mental defects of degeneracy and the scant provisions of law for the protection of the weaker mind, we may well join in the Arab's prayer, "Oh, God, be kind to the wicked: to the good thou hast already been sufficiently kind in making them good."

295 ALEXANDER STREET.

APPENDICITIS IN RELATION TO DISEASE OF THE UTERINE ADNEXÆ AND PREGNANCY.[1]

BY JOHN B. DEAVER, M. D., Philadelphia, Pa.,
Surgeon-in-chief of the German Hospital.

A PAPER upon the subject of appendicitis, with its fatality and many complications and the close relationship which it may bear to contignous organs and structures, will be of particular interest to this body of obstetricians and gynecologists. You will,

1. Read at the annual meeting of the American Association of Obstetricians and Gynecologists, Niagara Falls, August 17-20, 1897.

no doubt, agree with me that acute appendicitis is the most common and one of the most fatal of all acute intraäbdominal affections. Furthermore, that this mortality is in a great measure due to a failure to make an early diagnosis and to the character of the treatment instituted. The position which I have held—namely, to operate as soon as the diagnosis is made—I still maintain. Assuming that this is done very shortly after the onset of the attack, I know that this course is attended by the least mortality. My experience in the operative treatment of this dangerous, treacherous and fatal disease embraces many hundred cases, and I am prepared to make the statement that I have never seen a human life lost where operation was performed immediately following the onset of the disease. While I am aware that to discriminate between cases and to be able to say from the onset which are operative cases and which will recover without operation, or to be able to defer operation with absolute safety for two, three or more days rather than to rush in, as some put it, and remove the diseased appendix as soon as the diagnosis is made, may be more scientific, yet I know positively that this course is at the cost of many human lives. When, therefore, it becomes a question of following the lines of theory or that of experience which teaches practical facts and which when instituted will bring practical and favorable results, to my mind permits of no choice. The ultimate results of inflammation of this organ more than justify early operative interference.

Let us consider for a moment some of the results of appendiceal inflammation. First and most important, because of the high rate of mortality, is perforation of the appendix with general septic peritonitis. Next, perforation with localised abscess formation which, if not evacuated early, produces general sepsis, a tedious convalescence, a granulating wound and in many instances ventral hernia or fecal fistula. Appendicitis followed by large localised abscess necessarily means the destruction of a great deal of tissue which in some instances nature fails to repair, to say nothing of the loss of life when it occurs in the young or feeble. I consider the formation of a localised abscess occurring as the result of an appendicitis anything but the most fortunate culmination of the attack for the following reasons—namely, because the inflammation should not be allowed to reach that stage ; that in the hands of the majority of operators it is an excuse to leave the appendix, believing that with the evacuation of the abscess they have accomplished all that can be expected. This practice not

only offers an excuse in too many instances for leaving behind an appendix which is more liable to be the cause of subsequent and less favorable attacks, but also exposes the patient to the risk of an undiscovered secondary collection which in my experience is a frequent cause of death.

Before a body of operators comprising the membership of this association it would be presumptuous for me to draw a comparison between operation in the absence of and in the presence of pus. I may, however, bring to your attention some complications of pus formation which I have met with.

The presence of pus increases the danger of lymphatic infection. This is also true of infection through the portal system, (pyelo-phlebitis,) resulting in miliary abscess of the liver and death. The complications which may arise from an undisturbed localised appendiceal abscess are its rupture into the bladder, thus occasioning an entero-vesical fistula; rupture into a bronchus and evacuation by way of the mouth; rupture into the ascending colon, rectum or vagina, which is not to be considered a favorable termination and does not preclude the possibility of a recurrence of the inflammation; rupture into the ureter with evacuation of pus through the bladder. A complication which is not an uncommon sequence of the formation of a localised abscess is intestinal obstruction, due to adhesions which have been formed in the process of localisation. Again, secondary obstruction may follow the evacuation of an abscess, due to the subsequent contraction of its walls. A septic phlebitis, phlegmasia alba dolens, is not an uncommon sequence of localised abscess formation.

A condition of affairs which may arise as the result of a small collection which has remained undisturbed, is when the abscess wall has undergone a cheesy degeneration, involving in the process contiguous structures. When the bowel has been thus included an attempt to remove the degenerated mass will frequently bring to light a perforation of the bowel, often so large as to necessitate excision, enterorrhaphy or an anastomosis. In operating for appendicitis, the multiplication of the difficulties induced by pus formation must prepare the surgeon to expect to meet and handle any of the complications of abdominal surgery.

To recapitulate, the large mortality in appendicitis, as I have previously stated, is the result of too conservative measures in the early stage of the disease. Surgeons whose experience in the treatment of appendicitis has been large, I am sure, will to a man agree

with me in this statement. To be brief, I have yet to see a human life lost where, in an acute attack of appendicitis, the appendix has been removed within six to eight hours after the onset of the disease, while, on the other hand, I regret to say that I have seen many human lives lost by adopting the so-called conservative methods—namely, opium to relieve the pain, allowing the bowels to remain confined, leeches, fly blisters, turpentine stoops applied—any or all of which are not only useless but harmful. I cannot make this too strong, as I have seen five deaths in as many days, in all of which cases I am morally certain that had the appendix been removed immediately after the onset of the first pain all would have recovered.

The question naturally arises, who is largely responsible for this high mortality? Is it our teachers? Personally I feel that it is. What is the alternative? I would suggest that our professors in the different teaching institutions witness a number of operations done early (most of them see them done late), when I know there will no longer be the list of sceptics there are now. This, too, would be a healthful diet for the so-called surgical critic who writes articles condemning too frequent operation. The last-mentioned class evidently are wanting in experience, otherwise they could not but entertain different views.

The conditions in the female which call for careful thought in differentiating between one or other of the diseases of the uterine adnexæ and acute or chronic appendicitis are the following:

1. *Acute Salpingitis.*—There is frequently a close relationship between acute catarrhal appendicitis and right-sided acute salpingitis, due to Clado's ligament and the symptoms may as a result closely resemble each other. The great points of difference, however, are the history of infection, the slight degree of abdominal tenderness and rigidity, the location of the pain and the absence of vomiting, and in the case of appendicitis the pain migrating from epigastric or periumbilical to the right iliac fossa, the decided tenderness and rigidity of the lower right quadrant of the abdominal wall, suddenness of attack, accompanied by vomiting and no history of infection, the absence of signs by vaginal examination and the presence of a palpably enlarged appendix.

2. *Pyosalpinx* and *Ovarian Abscess.*—The presence in the recto-uterine cul-de-sac of an inflammatory mass in intimate relation with the uterus, which renders it partially or completely immovable and which can be clearly outlined by vaginal, bimanual

or combined vaginal and rectal examination, together with the history of a vagino-uterine infection and the presence of a septic fever, established the diagnosis of pyosalpinx or ovarian abscess. The essential points in the differentiation between these two affections and appendicitis are the suddenness of onset in the latter, accompanied by vomiting, the characteristic rigidity and tenderness following general abdominal pain.

Inflammation of the right ovary may be confounded with appendicitis, as it is attended with pain, tenderness in the right iliac fossa, nausea and fever. It is, however, always accompanied by disturbances of the uterine functions, is accompanied by the characteristic "ovarian" pain and is demonstrable by vaginal or bimanual examination. The tenderness is never so intense as in appendicitis and is not accompanied by a perceptibly enlarged appendix.

3. *Extrauterine Pregnancy.*—The history in these cases is usually that of partial or complete cessation of the menstrual flow for one, two or more periods, generally accompanied by other symptoms of pregnancy, with collapse supervening upon an attack of acute abdominal pain. The pain is long-continued and paroxysmal, but not colicky. An irregular, bloody, vaginal discharge, generally lighter in color than the normal menstrual flow and containing shreds of tissue, portions of the decidua, is present. Vaginal examination will detect a tender and sensitive mass in the posterior cul-de-sac, unless the pregnancy be an abdominal one. In the majority of these cases there is a history of sterility for five or six years previous to the abnormal conception.

When the product of conception occupies the fimbriated extremity of the right tube, the points of differentiation are more difficult, owing to the close proximity of the lesion to the position of the appendix and to the negative result of examination per vaginum prior to rupture. Should the two conditions occur coincidently it would be well nigh impossible to differentiate between them.

The chief points to be borne in mind, however, if the two conditions do not coëxist are the history and the absence of inflammatory symptoms prior to the rupture of the extrauterine and the presence of inflammatory symptom in appendicitis.

4. *Suppurating Ovarian Cyst.*—An appendiceal abscess and a small suppurating ovarian cyst on the right side present some symptoms in common which may give rise to difficulties in diagnosis. These symptoms are: painful tumor in the right iliac fossa,

which may be made out by vaginal, bimanual and rectal examinations ; symptoms of septicemia ; hectic temperature and history of previous gastric and urinary irritation. The differences, however, are marked and can be distinguished by careful consideration. In ovarian cyst the onset is gradual and a history of infection can generally be elicited. The pain is constant and of a dull character ; by pressure the significant "ovarian pain" may be produced, differing from the colicky and paroxysmal pain of appendicitis, while the tumor itself is more elastic, having apparently thinner walls and a more regular outline.

5. *Ovarian Cyst with Twisted Pedicle.*—Ovarian cyst with a twisted pedicle gives, as a rule, a history of a slowly growing tumor, which is so frequently unaccompanied with pain that its presence has been unsuspected until the accident occurred. The onset of the acute symptoms of a cyst with a twisted pedicle is sudden and is usually caused by excessive peristalsis of the intestines or from sudden changes of the position of the body, causing the tumor to revolve. If the twisting be complete and shut off the circulation the walls of the cyst will rapidly become gangrenous and the patient will become profoundly septic with localised peritonitis, which soon becomes general. Here, again, is seen a resemblance to an attack of appendicitis with abscess formation, but the difference in shape, elasticity, the slow growth, if noted, preceding the sudden onset, the difference in the character of the pain and the tenderness and the lessened degree of rigidity should enable one of experience to distinguish between the two.

If, however, for any reason, it is impossible to make a differential diagnosis, I would advise the lateral incision as the one to be chosen, because appendicitis is so much more common an affection that the chances are in favor of its being the latter. If it is an ovarian cyst the lateral incision can be closed and a median incision made for its removal. The median incision for appendicitis is illogical, unwise and in many instances will present anatomical impossibilities. Where the appendix lies behind the cecum and observes one of the northerly directions, if adherent, will present difficulties in the removal through the ordinary incision. It is, therefore, plain to be seen how much more difficult it would be to attempt its removal through the median line. These difficulties are generally enhanced when there is pus formation and, further, the danger of peritoneal infection is greatly multiplied.

6. *Fibroid Tumor.*—Appendicitis has been confounded with a local inflammation of a portion of the broad ligament overlying an intraligamentary fibroid tumor. The main points in the differential diagnosis are the history of metrorrhagia; the presence of a growth, detected upon vaginal examination, the tenderness and pain which is elicited upon abdominal palpation and is confined to the part of the wall overlying the mass.

7. *A varicose condition of the veins of the broad ligament may simulate chronic appendicitis.*—A differential diagnosis should, however, be easy to make, because on the one hand we have an absence of inflammatory symptoms and a characteristic dull, aching pain with nausea, which disappears when the veins are emptied upon the patient assuming the recumbent position. Again, in chronic appendicitis there is a history of one or more acute attacks with a palpably enlarged organ and the symptoms of chronic inflammation.

8. *Painful menstruation.*—A condition which may be misleading in the differentiation of appendicitis is the sudden onset of pain occurring in young unmarried women of a neurotic temperament at the ushering in of the menstrual period. The onset is sudden, the pain is paroxysmal and accompanied by nausea. There may be more or less rigidity of the lower abdominal walls, which is most frequently bilateral. The presence and the degree of the rigidity of the abdominal walls depends upon the amount of congestion of the ovaries, and whether one or both are involved. The pain, at first paroxysmal, is most severe during the first day of the menstrual flow. After this it may become continuous and, in some instances, last during the entire period. The tenderness and rigidity corresponds to the amount of ovarian congestion. If both ovaries are involved the tenderness will be bilateral. The pain at the onset differs, however, from that of appendicitis, being noninflammatory and localised from the beginning, while in appendicitis there is general abdominal pain, which later becomes localised in the right iliac fossa, while marked intestinal symptoms are present.

Menopause.—Some women during the climacteric occasionally complain of symptoms resembling appendicitis. They suffer from localised pain in the right side, gastric and intestinal disturbances and irregular temperature. As absence of the menstrual flow often exists, some difficulty may be experienced in reaching a correct diagnosis, particularly in those cases associated with obesity. A correct diagnosis as to the condition present, however, may be

established by careful inquiry into the previous history and by local examination. The latter means will demonstrate the absence of rigidity of the abdominal walls and no palpable enlargement of the appendix. The flushes, backaches and mental symptoms, incident to the menopause, will clear up the diagnosis. The mere mention, however, of the nervous affection, with its ubiquitous symptoms, will suffice.

I met with an unique condition, which I cannot better describe than by relating the state of affairs found at the time of operation. The case, I might state, presented a typical history of acute appendicitis, followed by abscess formation. The appendix was found in relation with the right ovary, to which it was bound by strong adhesions. The ovary was the seat of an abscess which had evidently been infected by the perforated appendix.

APPENDICITIS AND PREGNANCY.

Pregnancy complicating appendicitis forms one of the most serious conditions which may come under the consideration of the surgeon. Ordinarily appendicitis involves the risk of life; under this condition, however, the life of both mother and child in utero must be taken into consideration. It is claimed by some obstetricians that this is an infrequent occurrence (appendicitis) as a complication of pregnancy. While this may be the case, it is of so great an importance that I believe from its rarity it should receive even more earnest consideration on account of the disastrous results which are likely to follow the formation of an abscess of appendiceal origin at any period near the completion of the term of gestation. When we consider that the gravid uterus with its contents occupies the abdomen to a large extent and that there is a likelihood of the uterus forming a portion of the abscess wall, involving the risk of miscarriage and subsequent shrinking in size of the uterus, the consequent likelihood of adhesions being torn and the escape of the contents of the abscess into the general peritoneal cavity, it is easy to imagine the risk in allowing such a condition of affairs to occur. Women who present the history of previous attacks of appendicitis and complain of local pains and distress in the right iliac fossa, with all the symptoms of chronic appendicitis conjointly with pregnancy, should, in my opinion, be relieved of a chronically diseased appendix to avoid the likelihood of suffering from a condition of affairs as above stated. Although many of them may not go to the formation of pus, still the great

uncertainty which hangs over chronic disease of the appendix and the indefinite outlook as to the ultimate outcome when combined with pregnancy, makes it imperative that we should not be conservative enough to endanger the life of the patient.

A question may arise as to the differential diagnosis between peritonitis from a ruptured appendix or ruptured appendiceal abscess and peritonitis resulting from endometritis following abortion, miscarriage or labor at full term. The principal points of differentiation are the history of sudden onset, accompanied by nausea or vomiting, pain, rigidity and tenderness in the case of appendicitis; while in the latter there is a history of uterine infection prior to the inflammatory invasion of the peritoneal cavity; there is also an absence early of localised rigidity and tenderness which is diffused in purulent peritonitis.

The rupture of an appendiceal abscess or perforation of the appendix may be followed by a temporary cessation of the more pronounced subjective symptoms previous to general septic peritoneal infection. This may be accompanied by shock.

In puerperal peritonitis the symptoms appear slowly and are progressive and without amelioration.

The symptoms of appendicitis complicating pregnancy are those common to uncomplicated appendicitis, although there may be vomiting throughout the entire period of gestation, not associated with evidences of an inflammatory condition. What is true of appendicitis in general is also true when associated with pregnancy. The likelihood of referred pain, not necessarily confined to the region of the right iliac fossa, is also true when complicated by pregnancy. The diagnosis is rendered more difficult when pregnancy is advanced and the abdomen is filled with the uterus and its contents. The ability to elicit rigidity of the recti muscles is masked on this account, although tenderness will be more pronounced when pus is present. The cases reported of appendicitis complicating pregnancy, I believe, without exception, have given the history of previous attacks of inflammation of the appendix.

Appendicitis, associated with or complicating pregnancy within the early months of gestation, is not as serious by far as when it occurs later in pregnancy. The danger to involvement of the uterine walls in forming a part of the abscess wall, when such is present, is in distinct relation with the elevation of the uterus from the pelvis. The danger of miscarriage also increases as pregnancy advances for the same reason. Changes occur in the placenta when

the uterine muscle is included as a part of the abscess wall, especially if the placental attachment corresponds with that portion of the uterine wall forming a portion of the abscess wall. It has been conclusively shown in several instances that degeneration of the placenta has followed abscess formation. In one case the placenta had undergone partial calcarious change; miscarriage followed the evacuation of the abscess. The calcification was noted after the expulsion of the after-birth.

There may be some doubts still in these cases from the fact that the patient has had disturbance of digestion with nausea and vomiting. This condition, however, should not be confounded with nausea and vomiting at the first onset of appendicitis, as this is associated with evidence of inflammation.

A primary acute attack of appendicitis in a female that is pregnant might be mistaken for an approaching miscarriage; in the latter instance, however, the symptoms are not ushered in by severe abdominal pain and, as a rule, there is a lack of nausea attending the onset of local pain.

Acute appendicitis, complicating the later months of pregnancy, is by far a more dangerous condition to deal with. The appendix, if holding any of the southerly or easterly directions, is bound to be in relation with the uterus, and if pus be present the uterus is readily included in the mass of lymph thrown out to wall off the forming pus. Here lies the danger of appendicitis if allowed to go on to pus formation. If removed before pus is formed there is a decreased likelihood of miscarriage, a lessened possibility of peritoneal involvement, adhesion and freedom from peritonitis.

A serious question arises after pus has formed and the uterus is included as a part of the inner wall of the abscess cavity. We must face two dangers: first, the likelihood of infecting the peritoneum primarily; and second, whether it is proper at the time of evacuating the abscess cavity to induce a miscarriage, or allow nature to take its course and run the chance of avoiding an abortion. If we choose the former alternative and evacuate the uterus, after emptying the abscess cavity, it would seem as if the surgeon would be in a position to control the possible infection of the peritoneum by tearing loose of the adhesions to the uterine wall following the contraction of this organ and by a proper disposition of gauze prevent infection of the cavity. If we are to choose the latter alternative and leave the fetus in utero, then there exists a double menace to the future welfare of the patient, a probable

infection of the peritoneum, a possible miscarriage or the likelihood of carrying a dead child with the attending risk of uterine infection and the danger of septic endometritis and peritonitis. In addition to the danger of peritoneal infection from the likelihood of the tearing loose of the adhesions to the wall of the uterus, hemorrhage may occur, if the uterus is so bound down that proper contraction of the organ cannot take place.

The salient points which I particularly wish to bring to your attention, I will summarise in the closing paragraphs of this paper.

The many difficulties of diagnosis between disease of the uterine adnexa, pregnancy and appendicitis and the probability of their coëxistence in the same case, brings us face to face with the general rule "that he who opens an abdominal cavity must be prepared to meet any or all the complications which may arise in this most complex portion of the human anatomy."

The first and most important point is the necessity for an early diagnosis, because the good results for operation in appendicitis depend upon the time of operation. The danger increases in direct ratio with the progress of an attack.

In women who are liable to become pregnant and who have had an attack or attacks of appendicitis, the appendix should be taken out in order that the dangerous complication of pregnancy and appendicitis may be avoided.

This is particularly true if an attack of appendicitis supervenes upon pregnancy. The latter condition does not contraindicate operation under the circumstances, but rather, on the other hand, makes operation more imperative.

Another point is one based upon a rich personal experience, covering both operative and nonoperative cases. It is that the number of cases of appendicitis that become perfectly well, cases that do not suffer during the interval between attacks and that are not subject to the certainty of future attacks, are so extremely rare that the question of curative treatment resolves itself to the time of operation.

1634 Walnut Street.

If albuminuria complicates pregnancy (Parvin in *Dunglinson's Coll. and Clin. Rec.*) to a serious extent, the patient should be placed upon an almost absolute milk diet, with limewater to aid in its digestion, if necessary. Hot baths should be frequently taken and the bowels should be kept freely open. This complication should be thought of and examinations made for its determination in every case which comes under the physician's care in time to admit of it.

Clinical Report.

REPORT OF THREE CASES OF HYDROCEPHALUS.[1]

By L. SCHRÖTER, M. D., Buffalo, N. Y.

I REPORT my cases not on account of their special interest or that I can give you any new observations on the subject, but owing to the comparative rarity of true fetal hydrocephalus—one case occurring in about 3,000 labors. This and the gravity of the situation, when we are brought face to face with it, permits me to offer an excuse for calling your attention to such an old subject.

Case I.—The first case I saw was in 1890; the woman, a multipara, with nothing of interest in her history; she was in labor twenty hours, pains were very strong, membranes ruptured several days before; a midwife was in attendance. Before I was called to the case another physician attempted forceps for over an hour. I found os dilated, could feel the head at the brim, but could not determine the position. I applied forceps, but they slipped off every time I made traction; I then anesthetised the woman, introduced the whole hand in order to map out the position and then it was clear to me that it was a case of hydrocephalus, the sutures being far apart and the fontanelles very wide. On the palm of the examining hand I introduced a pair of long scissors and perforated the head; a gush of water corroborated the diagnosis. With the index and middle finger in the perforation opening I extracted the head without any difficulty. The woman suffered for many weeks with puerperal infection, also very extensive sloughing and ultimately succumbed.

Case II.—In 1891, Mrs. J., attended by a midwife in her third labor; breech presentation; midwife called me an hour after the extremities and trunk had been born. She tried all she could, but the head would not follow. I was not more successful than the midwife in my attempts to deliver manually the after-coming head, and having exhausted all the skill I possessed and all my patience, I decided to perforate, but it was impossible to reach any yielding spot, so I had to work my way through the foramen occipital magnum. To my great surprise, instead of brain tissue there came water in great quantity and the head followed on the very lightest traction. After the child had been washed the midwife directed my attention to a growth on his back. It was not hard for one to recognise a hydrorrhachis, which I did not notice earlier, because the child's back was lying posteriorly; furthermore, it was concealed from view by the towel I had around it. Another thing escaped my atten-

1. Read before the obstetric section of the Buffalo Academy of Medicine, October 12, 1897.

tion which might have aided me in arriving at a diagnosis—namely, I told the midwife to exert pressure on the head, I being unable to do it, as I had one hand on the nape of the neck, while the fingers of the other were making traction on the jaw; had I been able to feel the head myself its extraordinary size could not have escaped my attention. The convalescence was uneventful.

CASE III.—I saw in November, 1896, a woman, a multipara, 35 years old, whose history was negative. She was in labor only four hours, attended by her mother; it was a footling; the case was normal until the arms were born; the head would not follow, notwithstanding the efforts at traction made by several neighbor-women. I was called after three hours and found the woman quite comfortable, pains having stopped shortly after the arms had been born. The body of the child furnished sufficient proof of rough handling, which had lasted for over an hour, being very much bruised and of a deep blue color; on the back, in the lower lumbar region, there was a tumor the size of a lemon, of red wine color. I recognised that I had a case of spina bifida, with the possibilities of hydrocephalus. On examining I could feel a very soft spot, reminding one of the amniotic sac, which I punctured with a long pair of curved scissors, and later I saw that it was the mastoid fontanelle which I had perforated. The hydrocephalic fluid, that I caught in a vessel prepared for this purpose, measured over two quarts. The frontoöccipital circumference of the head was twenty-one inches. The patient recovered rapidly.

I might have, in this case, opened the hydrorrhachic sac and drained off the fluid, as advised by Tarnier, who has done it several times, but as the perforation of the head did not present any difficulty I chose this procedure, although I admit that draining through the spinal canal is to be preferred in identical cases, as it is much safer for the mother.

Having described my cases in a general way, I think it will be of interest to relate a few facts about hydrocephalus. We are unacquainted with the etiology of this anomaly, but our knowledge of it is of no practical importance, as it could hardly be prevented. However, of the greatest importance is an early diagnosis. An extremely large and rounded head must arouse our suspicion, which will be corroborated if we feel for the sutures and fontanelles, which are very wide; sometimes fluctuation may even be felt. The main difficulty in arriving at a diagnosis is that, as the head does not engage in most of the cases, we examine only a very small area of it and we may not meet a single suture; therefore, whenever in doubt, it is best to examine with the whole hand—a good general rule, by the way, in making diagnoses in difficult

obstetric cases—and then we cannot fail to grasp the situation. It is almost impossible to make the diagnosis when the child presents itself with breech, foot or transversely and, to make the thing worse, breech presentations are much more frequent in cases of hydrocephalus than normally; here the condition can only be presumed and the thing to guide us is the extraordinary size of the head as it is felt through the uterine walls; or, in some cases, spina bifida, if present, should direct our attention to it, as these two anomalies are quite often combined.

As if to counterbalance this difficulty of diagnosis, the danger of hydrocephalus of the after-coming head is less than in head presentation, as the pressure never will last so long. The physician, seeing the unsurmountable obstacle in extracting the head and knowing the child dead, will perforate and thus through an accurate therapy he will correct a wrong diagnosis. The difference in the prognosis in head and breech (resp. foot) presentations is best illustrated by Schuchard's statistics, where, out of seventy-three cases of hydrocephalus, rupture of the uterus occurred fourteen times (eight spontaneously) and all in head presentations. The prognosis is sometimes more favorable in higher degrees of hydrocephalus, on account of the greater facility in molding of the elastic membranous skull. In exceptional cases the internal hydrocephalus may be transformed into an external and thus the head will pass the pelvis without any difficulty. It is proven by statistics that 25 per cent. of women die from rupture of the uterus, the cause of this misfortune being the same as of rupture in neglected transverse presentations. In exceptional cases it may happen that the hydrocephalic head will rupture spontaneously. More interesting are cases like those reported by Professor Fochier in the Obstetrical Society of France (April, 1895). In one of his cases "the head presented, but did not come down, when suddenly a large amount of fluid was discharged, after which the head came down and was delivered. It was then found that a spina bifida had broken, the liquid, which filled up the cranial cavity, escaping through the opening thus made." In another case, similar to the preceding, the spinal tumor was also ruptured, giving issue to hydrocephalic fluid. The margins of the tumor were sutured by Fochier; the spina healed and the hydrocephalus was not reproduced.

The therapy in cases of hydrocephalus must be adapted to the special indications. Very seldom we will be able to save the life

of the child, but we must attempt to do it in every case and, therefore, we should not perforate, but puncture the head with a trocar. Cases are reported in which living children were born after such manipulation. Under no circumstances should forceps be applied to a hydrocephalic head, as it will undoubtedly slip off in every case, the curve of the forceps not corresponding to the curvature of a hydrocephalic head, the blades being too short and the bones too elastic. Even after the head has been tapped, according to Carl Schröder, podalic version is to be preferred to forceps, when speedy delivery is indicated, but I think there is too much danger in such a procedure; the cervix and vagina have been too extensively stretched by the hydrocephalic head and the attempt to turn may be the last stimulus in producing the rupture of the womb.

529 Fillmore Avenue.

Society Proceedings.

PROCEEDINGS OF THE MEDICAL SOCIETY OF THE COUNTY OF HERKIMER.

A SPECIAL meeting of the Medical Society of the County of Herkimer was held at the Spellman House, at Middleville, Saturday, October 9th, at 10 A. M., having been called for the purpose of taking appropriate action upon the death of Dr. C. W. Hamlin, of Middleville.

The president, Dr. W. E. Hays, of Frankfort, took the chair and called the meeting to order.

Dr. A. Walter Suiter announced to the society the death of Dr. Hamlin and proceeded to make remarks concerning his admirable qualities and particularly referred, at some length and with much feeling, to his intimate personal and professional relations with the deceased. He then presented the following minute and moved its unanimous adoption by the society, and that the secretary be directed to inscribe the same upon the records of the meeting.

Dr. Suiter's motion was seconded by Dr. D. M. Devendorf and carried.

On motion of Dr. S. R. Millington, of Poland, the secretary was also directed to secure the publication of the record.

MEMORIAL OF CHARLES WILLARD HAMLIN, M. D.

The Medical Society of the County of Herkimer, in special meeting assembled, having learned with extreme regret and sorrow of the death of our late distinguished fellow-member and associate, Charles Willard Hamlin, M. D., would hereby spread upon our minutes a record of his lamented demise and of our highest appreciation of him as a man, a physician, a soldier, a citizen and a friend.

He was born at Holland Patent, N. Y., December 21, 1839. He was graduated at an early age from the Whitestown Seminary and finished his literary courses of study by graduation from the State Normal School, at Albany, N. Y. He chose the profession of medicine and began its study in his native town under the office tutelage of Drs. D. A. Crane and Norton Wolcott. Shortly thereafter he heard the call "to arms!" and nobly responded by sacrificing his personal prospects to his country's needs, and enrolled himself as a private soldier in the 57th regiment of New York volunteer infantry. His antecedents as a medical student and his aptitude for hospital service at once won for him the position of hospital steward, and he was assigned to duty from time to time in both field and general hospitals during the entire three years for which he was enlisted. In this relation his associations were of the highest and most profitable character, in both an executive and a professional sense, and qualified him most admirably for his subsequent studies which he pursued, after his honorable discharge from the army, in the Bellevue Hospital Medical College, of New York City, whence he was graduated as a doctor of medicine in March, 1866. He began the practice of medicine at once in Oriskany Falls, N. Y., where he remained for a few years, when he came to this county and succeeded to the practice of his father-in-law, Dr. A. E. Darney, of Middleville, who was for many years an able and distinguished member of this society.

Dr. Hamlin was made a member of this society June 2, 1871, and has been an active and prominent figure herein since that time. He has been chosen to all the principal offices within the gift of the society, and has officiated in committee work with unexceled judgment and skill. As chairman for many years of the standing committee on hygiene he was especially active, and his able reports were written most intelligently, and some of them were honored by incorporation in the records of the corresponding committee of the state society.

He wrote many valuable papers, and his productions were characterised by great literary merit and originality. He was notable for the prominent part he always took in the discussion of general subjects, both medical and surgical, and constantly proved his thorough familiarity with the progress of every department of science. He represented this society for four years as a delegate to the Medical Society of the State of New York and was made a permanent member of that body by

special election in 1890. His interest in the state society's progress was manifested by the fact that he attended as a spectator and invited guest for fifteen years before he received his regular delegateship.

As a citizen he was noted for his liberal public spirit, and served the public interest most faithfully and intelligently in various positions of trust and responsibility.

His death took place at St. Luke's Hospital, in the City of Utica, on the morning of the 7th of October, 1897, and was caused by diabetic gangrene.

The doctor was the eldest of a family of eleven children and was the first to die. He is survived by his wife and one son, Dr. Varney B. Hamlin, of Clinton, N. Y. His father is still living in Holland Patent, N. Y., at the age of eighty-eight years. The funeral was held from the Church of the Memorial, Middleville, Saturday morning, October 9th, and, following the example set by his daughter, his remains were taken to Waterville, N. Y., and there cremated.

Dr. Hamlin's information was broad, his understanding was clear, his perception acute. He was frank and sincere in his utterances, generous in his every impulse, modest in his bearing. He loved nature, of which he was a most consistent student. He was devoted to his work as a physician and never failed to respond to the cry of distress, however onerous was the burden he was called upon to bear. In the monotonous grind of the daily duties of the medical practitioner, the details of which are oftentimes so painfully familiar to us all, he demonstrated on all occasions the great moral courage and devoted unselfishness of which he was so abundantly possessed. We take pardonable pride in offering the record of his worth and his self-sacrificing deeds for emulation. In his death we feel that we have lost a most valuable professional associate and a consistent, honorable and amiable friend.

He was for many years physician to the County House and County Insane Asylum before it passed to state control. He was a member of the Pan-American Medical Congress, and was one of those selected to represent the State of New York in that great organisation in Washington in 1893. He was a member of the New York Physicians' Mutual Aid Association of New York City and a member of the Protestant Episcopal Memorial Church, of Middleville. He was a broad-minded physician, enjoying the patronage of a wide and populous district. He was an obstetrician of superior qualification, an expert diagnostician and had comprehensive and far-seeing judgment as to prognosis and treatment. He was universally regarded, wherever known, as an "all-around" medical practitioner, both in attending and consulting service. He was a member of the Grand Army of the Republic and a Free Mason of high degree, having attained to the title of the thirty-second degree or Ancient Scottish Rite. Soon after the death of his only daughter, a

beautiful and accomplished young woman, he traveled extensively in Europe, and while climbing the Alps unfortunately met with an accident, thereby producing a wound on his great toe which failed to heal kindly, and was a subject of much concern to him during his sojourn abroad. Very serious symptoms rapidly developed after reaching home, necessitating a resort to amputation.

In propriâ personâ our friend and fellow-member now disappears from the sight of men. And while we bespeak for his ashes peace, they are left to remind us of the precious memory of

> Life's duties done,
> Life's race well run,
> Life's victories well won,
> Now cometh rest.

We extend to his stricken family and his immediate friends our profound sympathy, and beg that they will permit us to unite in grief with all who mourn.

> We shall meet, but we shall miss him;
> There will be one vacant chair.

The Society then adjourned and proceeded to attend the funeral in a body.

Progress in Medical Science.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

ELIGIBILITY OF GONORRHEIC APPLICANTS FOR LIFE INSURANCE.

DR. BUTTERWORTH (*Medical Examiner*, November, 1896,) says that this subject is deeply interesting to the medical mind, the insurance company and the majority of mankind, when it is remembered that a large percentage of applicants for life insurance, especially those living in towns and cities, have, at some time during their life, made the acquaintance of this undesirable malady, the immediate results of which are often disastrous to health; the remote results being manifested years after infection often cause great physical suffering and not infrequently death.

A recent authority states that he has found 15 per cent. of the cases coming under his observation suffering from cardiac lesions, following gonorrheal arthritis. Undoubtedly the excessive use of drugs by chronic gonorrheics often impairs the integrity of the kidneys and the tendency of this disease in a latent form is to recrudescence from excesses; thus it becomes a menace to the

associated urinary and genital organs, in its acute as well as in its chronic stage, and spreads by continuity of tissue and involves the remotest organs of these systems.

Gonorrhea is more rebellious to treatment and is a more fatal malady than syphilis. An eminent authority alleges that 90 per cent. of these cases are never cured. Surely numerous cases drag along many years without heed from its victims and unrecognised by their physicians. The continuous use of salol and the injudicious use of oleo-resins and balsams cause albuminuria and kidney irritation. Many pathologic sequelæ result from gonorrhea and its improper treatment. While the results of gonorrhea in the female are often very grave, they are slow and insidious in their progress. Owing to the different anatomical formation of the female genito-urinary system, woman suffers more from infection of the genitalia, while the male suffers more from disturbance of the urinary system. Gonorrhea and its results are frequently responsible for deaths attributed to other causes. Dr. Butterworth states that this disease and its bearings on life insurance have received insufficient attention from medical examiners.

Individual genital and venereal history is regarded as a closed chapter, a "*noli me tangere.*" For these reasons this subject does not receive the attention that its importance demands at the hands of the medical examiner and the insurance company.

Gonorrhea at any stage impairs the grade of the risk; it renders its victim vulnerable and often becomes a veritable Herod to the unfortunate female who receives the embraces of the gonorrheic leper.

If, during the examination, any signs of venereal disease are developed, the judicious, tactful physician may elicit the facts without offense and receive the grateful, appreciative approbation of both the applicant and the company for his careful diagnosis.

THE VALUE OF THE THERMO-MINERAL CURE IN THE TREATMENT OF SYPHILIS.

CORLETT (*Cleveland Journal*, December, 1896,) says: This method of treatment hastens elimination, destroys or lessens the virulence of the virus and inhibits or promotes the healing of existing lesions. This holds good in the various forms and phases of the disease and the sooner it is applied the better.

The thermo-mineral cure is especially applicable to the syphilitics dwelling in large cities, in whom mercury and the iodin com-

pounds have failed and in cases of long standing. Fresh air, sunlight, exercise and drinking hot water are equally important with bathing. As this system hastens the elimination of the virus, there is less probability of the late manifestation and development of lesions of the nervous system and there are no counter-indications to its judicious employment.

The mixed thermal and mercurial treatment, in addition to the advantages mentioned, stimulates the eliminative organs, so that a greater quantity of mercury and iodin compounds may be administered without producing their disagreeable effects. Mercury is efficient in destroying the syphilitic virus and causes the disappearance of the earlier lesions of the disease, while the iodin compounds, stimulating the absorbents, heal the later manifestations, without especially preventing their return. During the thermal cure the patient may be mercurialised by any of the usual methods of administration and the mercurialisation should not exceed a slight tenderness of the gums. The dosage varies according to the nature of the case, the age of the disease and the severity of the preceding symptoms. Thermal treatment confers more or less immunity against hydrargyrism.

Dr. Corlett advises the use of plain water, carbonised water and in some cases sulphur water and says that high thermality favors elimination. Plain water daily and a Turkish bath once a week is the form recommended for thermal treatment. Treatment should continue from one to four years.

The author has visited many of the springs in Europe and America. He believes that the vast majority of patients do not give a sufficient time at the springs for the best results; that one or two months each season, while it relieves present symptoms, is far too short for the permanency of cure.

Most patients visiting these springs content themselves with the belief that the disease is "boiled" out of them and attribute too much importance to the "cure" properties of the waters, thereby neglecting the essentials of successful treatment—namely, the use of mercury and iodin.

CLINICAL CLASSIFICATION OF NEPHRITIS.

Brouet, of Paris, (*Medical Record*, September 11, 1897,) says that there never has been anything like a satisfactory classification of nephritis until the present day, when the pathology of the kid-

ney has been completely changed by the studies and discoveries in pathological histology.

A classification to be of use must be rational and practical, whether it be founded upon clinical or histological data. The histological classification divides nephritis into parenchymatous (Virchow, 1852,) and interstitial (Beer, 1859). This division is accepted by almost all microscopists.

Bartholow recognised an acute and chronic parenchymatous nephritis and an interstitial nephritis or induration of the cellular tissue of the kidneys (atrophy, cirrhosis, sclerosis and the like). Tancereaux divided nephritis into two divisions—namely, primary diffuse and epithelial. Charcot called attention to the identity of parenchymatous nephritis and large, white kidney, and of interstitial nephritis and small, contracted kidney. Neigert, Cohnheim and Wagner said that the epithelial lesions always precede the alteration in the connective tissues and that if the lesions varied in different cases it was due to the difference in the degree of the progress of the disease. Brouet says that the natural classification is an etiological one and contends that there is no longer a question of the unity or duality of Bright's disease.

The size, consistency, form, coloration, granulation and the like, of diseased kidneys, depends on whether the disease process is rapid or slow, violent or mild.

The histological condition rather indicates the degree and progress of the malady than the division or classification of the disease. "Infectious diseases irritate, inflame, destroy *en masse;* chronic diseases, the dyscrasias and prolonged intoxications destroy the organ by a series of local inflammations or cause it to degenerate little by little."

A clinical classification is based upon the duration of the disease; as transitory, acute, subacute and chronic nephritis, comprehending the latent varieties.

In all cases of prolonged nephritis we have hypertrophy of the heart. Given the cause of the nephritis and the date of its appearance and we have sufficient data to explain what has already taken place; to prognosticate and to infer the existing anatomical form.

Dr. Crocq, of Brussels, said that albuminuria is the result of desquamation of the renal epithelium, and that we could not have a so-called physiological albuminuria, even as a transitory condition, without this cause. The albuminuria, if of short duration, the cause escapes one's notice. Parenchymatous inflammation of

the kidney is usually the cause of the excretion of albumin, which almost invariably points to chronic Bright's disease. Interstitial nephritis is quite another thing. The interstitial form is an inflammation of the connective tissue, which binds together the parenchymatous elements. If the epithelium is not involved there is no excretion of albumin, but albumin appears as soon as the epithelium is affected. There are two forms, clinically speaking, of chronic nephritis; one with and one without albumin, and these are identical with the anatomical forms called parenchymatous and interstitial.

Dr. Senator, of Berlin, said that when chronic nephritis is not the result of frank, acute nephritis, it comes from latent inflammations of the kidney long continued. The smallest amount of albuminuria is a sign of a pathological process in the kidney. Albumin cannot leak through the kidney except there be an organic affection of that organ. Chronic nephritis is often due to this latent process that so easily escapes notice.

Dr. Gerhardt, of Berlin, did not think that albuminuria was always due to organic lesion of the kidney. In some people there appeared to be a physiological albuminuria.

MEDICINE AND THERAPEUTICS.

CONDUCTED BY WILLIAM C. KRAUSS, M. D.,
Professor of nervous diseases, Medical Department, Niagara University.

EXTERNAL APPLICATION FOR PRURITUS.

THE aggravating itching of the skin in various parts of the body, of which many patients complain—a condition often unassociated with any discoverable pathologic state—can with almost absolute certainty be relieved with an ointment, as follows:

℞	Mentholis.....		120 (gr. ii.)
	Adipis lanæ hydrosi.....	15	(ʒss.)
	Adipis benzoinati.....	15	(ʒss.)

This gives almost instant relief. The menthol, in addition to its anesthetic action, also possesses germicidal action, and both of these probably are brought into play. Where an oily base is objectionable, alcohol may be used.—*Canada Lancet.*

CONCLUSIONS DRAWN FROM FORTY-NINE CASES OF MALARIA IN CINCINNATI.

Drs. Dunham and Walden in studying these cases of malaria followed out a certain line of treatment, as follows:

1. Quinia was the only drug used, with the exception of iron and arsenic as tonics and hydrochloric acid as a placebo.

2. Generally two large doses were given, one four hours before and the other about the time of the chill, which were administered for several days and afterward small doses of two grains every four hours were given as a tonic.

3. In the treatment of the estivoautumnal form large doses of quinia were given regularly every four hours and hypodermic injections of quinia were used.

4. Comparatively small doses of quinine were sufficient.

5. Hypodermic injections of quinia proved effective after negative results had been obtained from quinia used in other ways.

PARALYSIS OF THE ULNAR NERVE FROM BICYCLING.

Destat has communicated to the medical society of Lyons the following case of paralysis of the ulnar nerve, due to excessive bicycling: after a long ride the patient noticed a numbness of the little and ring fingers of the left hand; also a paresis of the interossei, lumbricoides and adductor muscles of the thumb. These symptoms are due to a compression of the ulnar nerve against the pisiform bone, especially the superficial and deep palmar branches. The author refers to another case, reported by Simpson, of neuritis of the ulnar nerve, with atrophy of the muscles supplied by the nerve, following a long ride on a wheel by a young man who was only a beginner in bicycling.

SENILE POLYNEURITIS.

Stein calls attention in the *Münchener Medizinische Wochenschrift*, No. 12, 1897, to this form of polyneuritis, first described by Oppenheim, met with in the aged and characterised by the following phenomena: absence of all the etiological factors commonly met with in the various forms of polyneuritis; presence, to a more or less marked degree, of arteriosclerosis; chronicity of this form; cranial nerves remaining unaffected; absence of sensitive and irritative phenomena; localisation in the lower extremities especially; absence of vesical disturbances.

The author reports three cases of this affection, accompanied, however, with painful manifestations and vesical disturbances. In reaching a diagnosis the author warns against confounding it with tabes dorsalis, which may be suspected, inasmuch as the absence of patellar tendon reflexes are absent in both affections and Romberg's sign was present in one case. The ataxia is not present; neither are the eye symptoms. In one case, where the diagnosis was somewhat in doubt, the autopsy failed to show any lesion of the spinal canal. The autopsy of the three cases showed the presence of a cerebral apoplexy and a high degree of arteriosclerosis.

TABES AND MOVABLE KIDNEY.

A. HABEL (*Centralblatt für Innere Medizin*, February 20, 1897,) calls attention to the fact that in the literatnre only Eichhorst and Brieger have mentioned the occurrence of tabes dorsalis and movable kidney, and gives the results of his researches at the clinic at Zurich for 1895. In sixty-eight cases of tabes, movable kidney was found six times and always in women. Of all the other cases received at the clinic at the same period of time, only 1 per cent. of the women were affected with movable kidney.

The author believes that in tabes there exists a disposition to movable kidney, owing to the relaxed condition or deficiency of tone in the ligaments of the abdominal organs.

NUTROSE IN DISEASES OF THE ALIMENTARY CANAL.

DR. APPLER, of Breslau, (*Therapeutische Monatshefte* for April, 1897,) describes the new preparation nutrose and gives his experience with the substitute for meat in cases of stomach and intestinal disorders.

Nutrose is a casein preparation prepared by the Hoechst Farbwerke, of Hoechst-on-Main. It is a white powder without any prononnced flavor or odor and is administered preferably in all kinds of soups (1 to 1½ tablespoonfuls = ⅓ to ½ ounce in each plateful), milk, coffee, cocoa (⅓ ounce to each cupful), or, where less liquid and more solid food is indicated, together with pearl-barley, rice, oatmeal and the like (½ to ⅔ ounce in each portion). In special cases nutrose mixes extremely well with various jellies or creams.

The indications for the employment of casein preparations, especially of nutrose, are manifold. Excluding for the present affections of the digestive organs, which will be considered separately, there present themselves in the front line consumptive diseases, such as tuberculosis and the like, cardiac and renal affections, cachexia from whatever cause, constitutional anemia or after hemorrhage and all affections in which it appears desirable to increase the albumen contents of the food imperceptibly. Likewise in the frequent repugnance exhibited to flesh and food in chlorosis, diabetes mellitus and the like, and in the convalescence of invalids, in order to convey to the system as much as possible easily assimilated food. Operations on the rectum, after which a less voluminous diet is desired, febrile diseases, *e. g.*, typhus abdominalis, in which principally only fluids can be taken, afford further indications. Finally, the employment of the casein preparation is recommended in gout and uric acid diathesis, as we are thereby enabled to convey to the system the necessary quantity of albumen without the nuclein which makes meat a forbidden diet to the gouty patient—a postulate which was not fulfilled by the nitrogenous nutrient preparations hitherto known, made from meat.

The broadest field of employment for nutrose is, however, in the numerous diseases of the alimentary canal.

THE TREATMENT OF ECZEMA WITH PICRIC ACID.

In an article on this subject in the *Nouveau Montpellier Médical* for September, M. A. Brousse remarks (*New York Medical Journal*) that the kerato-plastic property of picric acid, which has been successfully used in burns, seems to indicate that its employment is proper in the treatment of eczema, certain forms of which present great analogies to superficial burns. In 1889, he says, Cérasi employed this drug in seven cases of eczema with excellent results. Dr. McLennan, of Glasgow, was also very successful in the treatment of acute eczema and eczema of the face with this drug, which he used in a saturated solution. The author himself has obtained rapid recovery in several cases in which he has employed this treatment, the histories of which are given in detail. In cases of lichenoid eczema with a thick epidermis the acid was useless, but in acute oozing eczema accompanied by edema of the skin it was very useful. Under its influence in one case recovery was obtained in two weeks; in another case, in ten days.

Among the advantages of this treatment are the immediate relief produced by the application of the picric acid solution and the disappearance of the pain, heat and itching; the rapidity with which edematous tumefaction is effaced; and the absolute painlessness of the dressing, even when it is applied to the bare surface of the derma. According to the opinion of the most competent observers, the extensive application of this drug does not give rise to any symptoms of poisoning. Not only is it useful in acute eczema, but it is also useful in the acute attacks of chronic eczema which are so frequent in arthritics, particularly if they are accompanied by oozing and ulceration of the skin; it is equally useful in the seborrhoic eczema of infancy. The author states that the results obtained by him with this treatment absolutely confirm those indicated in the publication of Dr. McLennan, M. Gaucher and M. Leredde. M. Brousse therefore concludes that this treatment is indicated as follows: (1) In acute eczema; (2) in the acute attacks of chronic eczema, particularly if there is a tendency to oozing and ulceration of the skin; (3) in the seborrhoic eczema (impetiginous) of infancy. This treatment, he says, is contraindicated in chronic eczema and generally in all those of eczema which are accompanied by a thickening of the epidermis (lichenoid eczema). Nevertheless, it has the advantage, even in these cases, of allaying the itching.

(The following are all from the *Medical Review of Reviews.*)

A THERAPEUTIC POTPOURRI.

Dr. Cattell gives the following brief résumé of the most recent advances in therapeutics (*Internat. Med. Mag.*, August, 1897): Paraform pastilles may be purchased, which, by the aid of a small special apparatus, will quickly generate active formic aldehyde gas. An aqueous glycerin extract of the lungs of sheep is used by Brunet, both by the mouth and hypodermatically, in the treatment of pulmonary affections. Sodium copaibate, from ten to twenty-five grains, four, five or six times a day, is useful in the treatment of gonorrhea and is not so irritating to the intestinal tract and kidneys as corresponding doses of the oil of copaiba. Boric acid is of some value for the removal of the indelible yellow stains which sometimes remain upon the skin where burns have been treated with picric acid. When the skin has been burnt with carbolic acid, apply alcohol and wash in running water. The virulence of scarlet fever may be mitigated by large doses of carbolic

acid frequently repeated, and it is said that any person taking scarlet fever from a patient who has been under this treatment will invariably have the disease in a milder form. For the paroxysms of angina pectoris Osler recommends nitrate of amyl in doses of from two to five minims, large doses of morphine hypodermatically and, when very severe, inhalations of chloroform. Thymus gland, eight grains three times a day, gradually increased to from fifty to 100 grains daily, is used in the treatment of exophthalmic goitre. Apioline has been used successfully in neurotic dysmenorrhea. An infusion of birch leaves acts as a diuretic. It is said that the Röntgen rays have been used with some success for the removal of hairy, pigmented moles. Stowell says that thyroid-gland extract is an excellent galactagogue. Gillette has found the injection of a teaspoonful of hydrogen dioxide an efficient remedy for epistaxis. Mariotti, after evacuating the contents of a tuberculous abscess, injects a 10 per cent. solution of oil of cloves suspended in sterilised oils. Chantemesse believes that the antitoxins may be injected into the rectum, after an enema, in the same doses and with as good results as when applied hypodermatically. Bienwald has arrested the hemorrhage of a small wound on the face of an hemophilic by the application of freshly-drawn blood from a healthy woman. Wright has had success with a solution of fibrin ferment and chloride of calcium as a styptic.

COMPOUND TINCTURE FOR THE TREATMENT OF GOUT.

℞	Tinct. stramonii	4	(ʒi.)
	Tinct. colchici	6	(ʒiss.)
	Tinct. guaiaci	60	(℥ii.)

M. Three teaspoonfuls daily in milk.

—*Dr. V. Gayle.*

TREATMENT OF SOFT CHANCRE BY SALICYLIC ACID OINTMENT.

A Hungarian practitioner, Dr. E. Szánto, has come to the conclusion that, of all the means employed against soft chancre, salicylic acid is the best. He uses it in the form of an ointment as follows:

℞	Ac. Salicylic	1	(gr. xv.)
	Vaselin	30	(℥i.)
	Tinct. benzoin	2	(ʒss,)

For external use.

The ulcer is first washed with a solution of corrosive sublimate and then covered with a piece of gauze, well charged with the salicylic ointment. With this treatment the chancre will heal much more rapidly than with any other, including iodoform; and salicylic acid possesses the notable advantage of being quite odorless.

In the above formula the tincture of benzoin is added, not only to perfume the ointment, but also to increase its activity, as it has the property of holding the salicylic acid in a state of solution.—*Med. Week.*

QUININE MIXTURE.

The following is advantageous in irritable stomach when quinine is to be given:

℞	Quinine sulph	12 (gr. ii.)
	Ac. citrici	36 (gr. vi.)
	Syr. simplici	035 (gr. ss.)
	Syr. aurantii flor	035 (gr. ss.)

This is to be placed in a wineglass containing bicarbonate of sodium (from three to five grains) in saturated solution and drunk during effervescence.—*Jour. de Méd. de Paris.*

SYRUP FOR THE TREATMENT OF EPILEPSY WITH VIOLENT EXCITEMENT.

℞	Pot. bromidi 70	(℥ii 2-5.)
	Pilocarpin nitratis	035 (gr. ¼.)
	Syr. amygdalæ amaræ.....400	(℥xiii.)
	Aquæ.....600	(℥xx.)

A tablespoonful at a time.

Each tablespoonful of this syrup contains about a gramme of potassium bromide and half a milligramme of pilocarpin.

Under this treatment Dr. Voisin has found the maniacal excitement to cease and the diuresis to become more active. Gastric disturbances, due to the potassium bromide, are said to be less marked in such patients than usually, so that it is unnecessary to discontinue the treatment as frequently as is otherwise the case.—*Med. Week.*

HYSTERIA DUE TO PELVIC DISEASE.

It is very common in women suffering from pelvic disease to find more or less pronounced symptoms of mental depression. They

are brooding, despondent and frequently given to tears. For the relief of this condition, along with change of environment and directions for plenty of outdoor exercise, Dr. Talley found the following formula of service :

R	Strychnin sulph	0026 (gr. $\frac{1}{42}$.)
	Quinin sulph	063 (gr. iss.)
	Ext. hyoscyam	063 (gr. iss.)
	Ferri redact	06 (gr. i.)

M. For one pill. Dose—One pill thrice daily.

—*Polyclinic.*

Cocaine poisoning is best treated by the recumbent position, amyl nitrite and aromatic spirits of ammonia, in water, slowly sipped.

FOR FEVER BLISTERS.

R	Camphoris		33 (gr. v.)
	Pulv. marantæ	2	(gr. xxx.)
	Bismuth subnitratis	2	(gr. xxx.)
	M. aquæ rosæ	16	(ʒ iv.)

RHEUMATISM.

For cases of acute or subacute rheumatism, in which there is considerable involvement of the muscles and also great pain, Dr. Eshner sometimes prescribes :

R	Phenazoni (antipyrin)	8	(ʒ ii.)
	Sodii salicylat	12	(ʒ iii.)
	Ammonii bromid	16	(ʒ iv.)
	Aq. Cinnamomi	90	(℥ iii.)

M. Dose—A teaspoonful every three or four hours.

THE PREVENTION OF IODISM IN THE USE OF POTASSIUM IODIDE.

Spencer (*Journal de Médécine de Paris*) is credited with the following formula :

R	Potass. iodidi	parts xxx.
	Ammon. ferrocitratis	parts iv.
	Tinct. nucis vomicæ	parts viij.
	Aq. distillatæ	parts xxx.
	Tinct. cinchonæ .....q. s. ad.	parts cxx.

M. Sig. A teaspoonful in half a glass of water, to be taken after each meal. The tincture of nux vomica and the ammoniocitrate of iron are said to check the tendency to coryza and at the same time to act as tonics.

ERYSIPELAS OF THE FACE.

THE *Presse Medicale* recommends the following formula :

℞	Ac. carbolici		
	Tinct. iodini		
	Alcoholis	aā 30	(℥i.)
	Olei terebinthinæ	60	(℥ii.)
	Glycerini	90	(℥iii.)

M. : The lesions are to be painted with this liniment every two hours, and covered with aseptic tarlatan.

AN APPLICATION FOR URTICARIA.

GAUCHER (cited in the *Gazette Hebdomadaire de Medicine et de Chirurgie* for July) recommends this :

℞	Mentholis	1 part.
	Chloroformi	aā 3 parts.
	Etheris	aā 3 parts.
	Spts. camphoris	aā 3 parts.

M. To be used as a spray or as a lotion. The part should then be dusted with powdered starch or zinc oxide.

THE CREOSOTE TREATMENT WITH CHILDREN.

HOCK (*Wiener Med. Blat.; Centrabl. für Innere Med.*) uses creosote not only in tuberculosis, but also for persistent catarrhal phenomena after measles and whooping cough, according to the following prescription :

℞	Creasoti	1	(gr. xv.)
	Olei morrhuæ	90	(℥ iij.)
	Sacch		05 (gr. ¾.)

M. From two teaspoonfuls to three tablespoonfuls to be taken daily.

DR. WEIL states in the *Practitioner* that every form of vomiting during gestation can be relieved by a 20 per cent. solution of menthol in olive oil. Dose, 10 drops on sugar whenever nausea appears."—*West. Med. Rev.*

IODIDES AS TENICIDES.

ACCORDING to Dr. Newington, in the *Semaine Medicale*, the iodides appear to possess marked tenicidal properties. One of his patients

unsuspectedly passed a large tapeworm after having taken the following mixture:

℞	Pot. iodidi	2	(gr. xxxv.)
	Iodini		73 (gr. xiss.)
	Aquæ	30	(fl℥j.)

M. Sig. Ten drops three times daily.

Dr. Newington has subsequently had occasion to prescribe the above solution to several persons having tapeworms and in every instance the tenia was passed dead and no relapse ever occurred, it is reported.

CHRONIC RHEUMATISM.

℞	Potassii iodidi	12	(ʒiij.)
	Vini colchici sem		
	Tinct. opii camph ... āā	60	(℥ij.)
	Tinct. stramonii	24	(ʒvi.)
	Tinct. cimicifugæ	90	(℥iij.)

M. Sig. A teaspoonful thrice daily.—*St. Luke's Hospital. N. Y.*

—*Georg. Jour. of Med. and Surg.*

ACUTE LOCALISED PROSTATITIS.

℞	Iodoformi		
	Ext. hyoscyami ... āā		03 (gr. ss.)
	Olei theobromati	3	(gr. xlv.)

M. Sig. Use as a suppository.

—*Journal des Practiciens.*

LUMBAGO.

℞	Atropin		25 (gr. iv.)
	Ac. oleic	4	(ʒi.)
	Olei ricini	4	(ʒi.)
	Olei lavandulæ		33 (mv.)
	Spts. rect ... q. s. ad.	30	(℥i.)

Sig. For local application.

—*Martindale and Westcott.*

CANCER OF THE UTERUS.

℞	Sodii chlorat	20	(ʒv.)
	Syr. aurant. flor	30	(℥i.)
	Aq. dest	90	(℥iij.)

M. Sig. From two to eight teaspoonfuls to be taken daily.

Locally :

℞ Sodii chlorat.....		
Bismuth subnitrat aa.....	5	(ʒiiss.)
Iodoform.....	2	(ʒi.)

M. Sig. Apply a small quantity on a tampon to the cervix.

—*E. Duvrae.*

MEDICAL EDUCATION AND STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Member New York State Medical Examining and Licensing Board.

SOME GEMS FROM THE RECENT EXAMINATION PAPERS.

BY W. D. HAMAKER, M. D., Meadville, Pa.,
Member of the Pennsylvania State Board of Medical Examiners.

THERE still remain a few people in Pennsylvania who think that an examining board is unnecessary, and there are a number in the medical profession who think that the examinations should be very easy and that no special stress should be laid on preliminary education. In order that the profession may know some of the ridiculous answers to questions and some of the evidences of lack of elementary education, I desire to give the readers of the *Pennsylvania Medical Journal* a list of some of the answers that I picked up in the recent examination held in June.

One applicant spelled tongue, "tong"; another spelled salts, "saults"; another spelled broom, "brougham"; another spelled ceratum, "serratim"; another spelled fly, "fley," and flies, "flyes." One young lady spelled sugar, "shugar"; another applicant spelled Spain, "Spane." Fir-tree was spelled "fur-tree"; another bright young man had a new way to spell rochelle, and spelled it "roach-sheel," and another spelled pulse "pultz"; and sore was spelled "soar"; another spelled pus, "puss." "Corpustle," "pacients," and "beene" were found. In addition to the bright spelling quoted above, great lapses were found in grammar.

Some answers to the questions were quite amusing. The following are some of the most striking : "Hydrogen gass is degenerated from the urea." "Cantharides is derived from the root of the plant." "Pix liquida is from the Pinus Somniferous group." "Cantharides is derived from the destructive distillation of the Spanish fly." "The malar bone articulates with the occipital

bone." "Picrotoxin is an alkaloid of senna and rhubarb." "Spartein and eserine are alkaloids of somnis papaverum." One said that "Spartein was derived from Sparta," and another said it "was derived from Spartus." Another said "that vinegar was an antidote for mineral acid poisons," and another stated that "an infusion of Spanish fly was one of the official preparations." Another gave us the information that "the uriniferous tubules secrete the seminal fluid." Another said that "belladonna locks up all of the secretions except the urine and feces." Another stated, without additional matter of any kind, that "the differential diagnosis between epilepsy and hysteria is that in epilepsy they fall on the stove and burn themselves and in hysteria they don't." Turning to obstetrics we found one man who, in rigid os, "would decapitate or perform craniotomy or would put on the forceps and deliver at once." Another in performing version, "would put his finger in the child's mouth and bring the chin under the os pubis and hold his hand over the mouth to prevent the liquor amnia from choking it." Another stated "that the endocardium is a mucous membrane which weighs two ounces, and is separated from the pleura by the pericardium." Another stated "that the function of the optic nerve is to contract the pupil and move the eyeball." A new diagnostic symptom was offered by another man whose paper stated "that in cerebral hemorrhage the patient may vomit the cerebro-spinal fluid!" And yet all these men have diplomas.—*Pennsylvania Medical Journal.*

A NEW LAW GOVERNING TRANSIENT PRACTITIONERS OF MEDICINE.

THE following amendment of an act (*Pennsylvania Med. Jour.*, August, 1897,) to prevent incompetent persons from engaging in the practice of medicine was passed at the last session of the legislature of this state and was approved by Governor Hastings:

AN ACT

To amend the fourth section of an act, entitled An act to protect the people of the commonwealth against incompetent practitioners of medicine, surgery and obstetrics, approved the twenty-fourth day of March, one thousand eight hundred and seventy-seven, so as to require a license to be taken out by transient practitioners, who practise medicine gratuitously or so advertise, as well as those who practise for a valuable consideration.

Section 1. Be it enacted, etc., that section four of an act, entitled An act to protect the people of the commonwealth against incompetent

practitioners of medicine, surgery and obstetrics, approved the twenty-fourth day of March, one thousand eight hundred and seventy-seven, which reads as follows:

Section 4. Any person who shall attempt to practise medicine or surgery for a valuable consideration, by opening a transient office within this commonwealth, or who shall, by handbills or other form of written or printed advertisement, assign such transient office or other place to persons seeking medicine or surgical advice or prescription, or who shall itinerate from place to place or from house to house, and shall propose to cure any person sick or afflicted by the use of any medicine, means or agency whatsoever for a valuable consideration, shall, before being allowed to practise in this manner, appear before the clerk of the court of quarter sessions of the county wherein such person desires to practise and shall furnish satisfactory evidence to such clerk that the provisions of this act have been complied with, and shall in addition take out a license for one year, and pay into the county treasury for the use of such county the sum of fifty dollars therefor; whereupon it shall be the duty of such clerk to issue to such applicant a proper certificate of license on payment of the fee of five dollars for his services, be and the same is hereby amended so as to read as follows: Section 4. Any person who shall attempt to practise medicine or surgery either for a valuable consideration or without any charge or remuneration therefor, by opening a transient office within this commonwealth, or who shall, by handbill or other form of written or printed advertisements, assign such transient office or other place to persons seeking medicine or surgical advice or prescription, or who shall itinerate from place to place or from house to house, and shall propose to cure any person sick or afflicted by the use of any medicine, means or agency whatsoever, either for a valuable consideration or without any charge or remuneration therefor, shall, before being allowed to practise in this manner, appear before the clerk of the court of quarter sessions of the county wherein such person desires to practise, and shall furnish satisfactory evidence to such clerk that the provisions of this act have been complied with, and shall, in addition, take out a license for each day, and pay into the county treasury for the use of such county the sum of ten dollars therefor; whereupon it shall be the duty of such clerk to issue to such applicant a proper certificate of license on payment of the fee of five dollars for his services.

Section 2. All acts or parts of acts inconsistent herewith are hereby repealed.

It is not clear to us just what it is intended to accomplish by this amendment. While the act apparently countenances the practice of medicine by traveling and advertising doctors it would seem that the imposition of a license fee of $10 for each day would

so discourage these irregulars as to practically drive them out of the state. If, as it would seem on its face, it will subject all advertisers to the payment of a daily fee of $10 it may serve a good purpose, but that such practitioners should be legalised at any price seems questionable, to say the least in its favor.

THE WISCONSIN LAW.

THERE are some defects in the new medical practice act of Wisconsin (*Medical Standard*, September, 1897,) which should not appear in a law passed at this time by the legislature of so progressive a state as Wisconsin.

These shortcomings, however, are mostly duplications of mistakes made by other states.

A feature of the Wisconsin law which is common to nearly all laws of this class—medical, pharmacal, dental, etc.,—is the provision requiring that the governor shall appoint the membership of the board of examiners from a list submitted by certain state medical associations. The incorporation of this provision, in a mandatory form, in the law would appear to indicate that the lawyers of the legislature gave the measure but slight attention, since it is well established in constitutional rulings that such a provision is not only of no legal force, but furnishes a basis for suits to test the validity of the law. Any law which restricts the chief executive in the free exercise of the appointing power will be declared unconstitutional when brought before the proper tribunal.

The latest decision to establish this fact clearly is that of the Supreme Court of Minnesota in the case of the state pharmaceutical association against the governor, who ignored the recommendations of the association and appointed a gentleman whose name was not on the list submitted. While this provision, doubtless, would be held by the same authority as not invalidating any act of the board in the performance of its duties, it would have to be considered were the entire act in all its features brought into question by some one opposed to its execution.

To avoid the possibility of legal complications, the appointing clause in medical practice acts should read substantially as follows:

The governor shall appoint, with the advice and consent of the senate, a board to be known as the state board of medical examiners, to consist of . . physicians legally registered in the state of . . . to be chosen as nearly as may be from the regular, homeopathic, eclectic or other systems of medical practice, in such manner as shall approxi-

mate in the number of members accredited to each system the numerical proportion of the physicians professing such systems, respectively, in the state. The state medical societies representing the various systems of medical practice, respectively, may, upon the occurrence of a vacancy or vacancies in the representation on said board of medical examiners, report to the governor direct, recommending the names of at least three persons for every such vacancy.

There is no provision in the Wisconsin law for re-registration. For this, it may be said, the state would have had but few precedents. With the opportunity for observation furnished by the experience of their own and other states, however, this requirement should have been recognised by the promoters of the law as an indispensable feature. The simplest and most effective plan for keeping out unqualified practitioners is by annual re-registration. There is no other way of securing absolutely reliable statistics and of determining that the law is uniformly enforced. The re-registration clause will be an important part of the laws of the future.

The law makes the secretary a member of the board. This has been found in the experience of other states an undesirable provision. The secretary is the executive officer of the board, and in the discharge of such duties should not serve in the capacity of a member of the board. The salary allowed the secretary, of $300, is wholly inadequate and affords no just compensation for the actual time and labor required for the discharge of the duties of the position.

NEW YORK STATE DENTAL EXAMINERS.

The annual meeting of the New York State Board of Dental Examiners was held in Albany, October 2, 1897. The relation of the New York examiners, the New York dentists and New York colleges to those of other states was carefully considered. It was decided that the methods and ends sought by the National Association of Dental Examiners were not in harmony with those of this state and the board would not, therefore, join that association or act with it. Only once had it been represented in the national association, and then it was soon discovered that the body had no recognised standard of its own and that it was not working on the same lines as those of the New York State Board. Hence it could not continue membership in that association.

It was decided that the dental colleges of the State of New York must be protected in their higher standard. The National

Association of Dental Faculties this year materially depressed its preliminary requirements and the colleges belonging to that association will admit students which the New York schools cannot receive. It was fully determined that such measures as would effectually exclude the graduates of colleges with a low standard of preliminary acquirements should be adopted, and Drs. William Carr and William Jarvie were appointed a committee to consult with the regents and the colleges and determine what should be done, they to report at the next meeting of the board.

Dr. A. P. Southwick was elected president of the board, Dr. Frank French, secretary, and Dr. William Carr, editor of the question papers.—*Dental Practitioner*, October.

THREE YEARS' COLLEGES.

What can a sensible student be thinking about who will deliberately enter a college which demands only three years' course for graduation? Does he not know that he would be barred from entering a large number of states now with a diploma from such a school, and that many more states have passed laws that will require a diploma from a four years' school after 1898? And yet these three-year schools seem to flourish.—*Western Medical Review.*

THE GOVERNOR SUSTAINS THE MAJESTY OF THE MEDICAL LAW IN OHIO.

The *Columbus Medical Journal*, August 17, 1897, says: In the cases of W. A. France and W. F. Hale, both of whom made an appeal to the Governor and Attorney-General from the action of the State Board of Registration and Examination in refusing them a certificate, decisions were rendered by the Governor and Attorney-General on August 4, 1897. The action of the board was sustained by these officials in their decision.

"Dr." W. A. France applied for registration, on the basis of having been a legal practitioner of medicine in the State of Ohio, on the 27th day of February, 1896. Charges were preferred against him, alleging that he had been guilty of felony and gross immorality, and that he was not, during the ten years previous to February 27, 1896, a person of good moral character. These charges were heard before the board and the application of Dr. France was rejected and a certificate refused to him on the above-named grounds. The appeal was taken to the Governor and Attorney-

General from the action of the board with the above-mentioned result.

In the case of W. F. Hale, of Jackson, Ohio, upon application for registration as legal practitioner, charges were filed alleging that W. F. Hale was not a person of good moral character during the ten years previous to February 27, 1896, and that he was guilty of gross immorality, in that he abducted the prosecuting witness in a case of abortion pending against him in the Court of Common Pleas of Jackson county. "Dr." Hale was also given a hearing before the board, and was refused a certificate. He took an appeal to the Governor and Attorney-General with the result of the Governor sustaining the board's decision in his case. It is refreshing as well as encouraging to the medical profession to have a Governor as well as an Attorney-Generat who have the stamina and good judgment to give their support to the advancement of the medical and surgical sciences and to the suppression of any form of quackery.

ILLEGAL PRACTITIONERS.

UNLICENSED and illegal practitioners of medicine in the state of Maryland are not wanted (editorial in *Maryland Med. Jour.*) and all good, loyal physicians should help to purge the state of such undesirable material and keep out those driven from other states.

The Board of Medical examiners, whose duty it is primarily to examine candidates and license such as are fit to practise, has always kept an eye on those practising illegally and has always done its duty, but it must be remembered that the board cannot be over the whole state and, therefore, physicians themselves should take sufficient interest in the welfare of the profession in Maryland and take steps to have all quacks and persons practising, not in accordance with the laws, fined, imprisoned and driven out.

Someone must procure evidence and prosecute and if any physician knows of cases deserving notice and will communicate with the board through Dr. J. McPherson Scott, at Hagerstown, he will receive help and instruction how to act. Physicians, as well as pretenders, would do well to note the accompanying instance sent to the *Journal* and see that the board is ever active and watchful to do its full duty:

An itinerant vender of drugs, who increased the sale of his nostrums by pretending to be a physician registered in Baltimore, was brought to grief not long since in Caroline county. Upon information having been given the board of medical examiners

by a physician of a neighboring county, a warrant was issued for his arrest as an illegal practitioner. He was tried in Denton and on the witness stand admitted that he was not a graduate of any medical college, neither was he a registered physician of Baltimore or elsewhere. His conviction promptly followed with fine and costs.

This incident only shows how easily the medical law could be enforced and the community be rid of quacks and unprofessionals. Physicians are the men of all others interested in the suppression of the pretender. The identity of the individual and knowledge of the facts necessary for prosecution come to them without search and with this information properly used some of the good results contemplated by the medical law would be quickly secured. There are numerous violators of the law going "unwhipt of justice" and the Caroline county case ought to have many imitators.

THE ILLINOIS STATE BOARD OF HEALTH RAISES THE STANDARD OF MEDICAL EDUCATION.

At a meeting of the Illinois State Board of Health, held August 26th, at East St. Louis, (*Tri-State Med. Jour.*, September, 1897,) it was decided to raise the standard of medical education of Illinois from three years to an obligatory course of four years. Moreover, in order to matriculate at a medical college in Illinois, it will henceforth be necessary for students to pass an examination in all of the ordinary studies, algebra, as far as quadratics, elementary physics and Latin equivalent to one year's study in the high school. A presentation of a college degree in letters or science, a diploma or certificate of graduation from an academy or high school, or a certificate showing that the candidate has passed the entrance examination to an accredited college or scientific school, will also enable the applicant to enter a college.

The members present at the meeting were Louis Adelsberger, of Waterloo, president; C. B. Johnson, of Champaign; Florence W. Hunt, of Chicago; P. H. Wessell, of Moline; M. Meyerovitz, of Chicago; Z. D. French, of Lawrenceville; Julius Kohl, of Belleville and J. A. Egan, secretary.

MEDICAL REGISTRATION.

During the past two years (*Med. Standard*, September, 1897,) the daily press of the West has been filled with comments on the enforcement of the laws requiring the registration of physicians

in those states which adopted new medical practice acts. Missouri, Ohio and Indiana have been particularly conspicuous in this respect. The extent of this comment usually may be taken as a fair criterion of the necessity existing for the inauguration of a more strict law and is ample justification of the action of the medical profession in demanding such legislation. All classes of irresponsible practitioners do not hesitate to rush into the public prints and to make threats of employing legal processes to prevent the enforcement of the law. Such men know they have nothing to lose and if their game of bluff can be worked successfully they have gained so much. But it is a cause of regret, as also a matter of surprise, that in every state are to be found reputable physicians, entitled to registration, who for purely sentimental reasons oppose the enforcement of the law and whose interviews are ever ready for the too willing representatives of journals, the highest ideals of which are the dissemination of the sensational. How such members of the profession reconcile their acts in opposing the law with the sentiment which leads them to refuse it their compliance and support is more than can be discerned by the ordinary mind. A little thought would show that they were furnishing the real basis for the opposition to proper restrictions upon which the army of quacks raise their noisy cry. Medical laws are not made in the interest of any part of the medical profession, but have their origin in the protection of the public against the practitioner without qualification for his duties. No reputable member of the profession should seek to obstruct the operation of such a law or to render indirect aid to those who make no pretense to the claims of legitimate practitioners. The papers of Indiana are filled with threats against the law and abuse of the members of the board of medical examiners. Charges of personal spite are even made, but in no case has there appeared to be the least justification for criticism of the course of the board. This has been the history of every other board and in each case it has been equally true that those without any standing in justice before the law have resorted to personal vilification to create public sentiment in their behalf. There has been enough of this for members of the medical profession to understand the tactics fully and any sympathy or encouragement offered these persons is direct opposition to the integrity of the profession and the welfare of the public. Medical examiners should use every precaution against an injustice to any one, but favors cannot be shown because of appeals or criticism.

GETTING IN THEIR WORK.

In April, 1895, (*Texas Med. Jour.*, March, 1897,) the law against quacks went into effect in New York, since which time the New York County Medical Society has caused the arrest of eighty-three persons for illegal practice of medicine, and has obtained convictions in fifty-one cases. These fifty-one persons have paid $3,690 in fines, and a number of them have been sent to jail besides. The legal department of the society has a large number of cases pending, says the New York *Medical Record*. Why cannot the Texas State Medical Society have a legal department to look after these ducks?

Selections.

THE RATIONAL TREATMENT OF THE CONSTITUTIONAL FACTOR IN THE CAUSATION OF HAY-FEVER.

By CHARLES PREVOST GRAYSON, M. D.,
Lecturer on laryngology and rhinology in the Medical Department of the University of Pennsylvania; Chief of Department for Diseases of Throat and Nose, University Hospital.

SO LONG as almost all the laity and a large proportion of medical men continue to regard hay-fever as incurable; so long as a number of general practitioners persist in the attempt to cure it solely through the agency of drugs, and a number of rhino-laryngologists seek to attain the same and solely through intra-nasal medication or surgery; so long, in fine, as the ultimate nature of the disease is imperfectly understood or even regarded with indifference, so long will there be ample justification for brief papers that shall not only insist that the disease can almost invariably be cured, but shall show how this may be accomplished.

A moment's reference to the several trivial theories that attempt to explain the evolution of the disease cannot be avoided; but ferments, microörganisms, acid nasal secretions and the like are all idle speculations that add nothing whatever of value to our means of treating hay-fever. They merely hang upon the skirts of what we positively know of the malady and serve only to distract attention from the broad therapeutic principles that must underlie its successful management. What we do know of it can be epitomised in a few words. Three factors compose the causa-

tive combination ; of these, two—the existence of an external irritant and of some intranasal abnormality—are accepted without discussion. As to the third, however, there is considerable diversity of opinion. That it is constitutional or diathetic is generally believed, but whether it is sufficiently well defined to be given a specific name, such as "the neurotic temperament" or the "gouty or uric acid diathesis," or some other equally distinctive title, is still far from being settled. The very fact that opinions concerning it differ so widely, as the two suggested titles indicate, is evidence of the want of unanimity concerning its precise nature. As a matter of fact, however, names in a case of this kind are merely ornamental, and are, indeed, objectionable, for the reason that they tend to discourage separate and searching study of each case. Even if we grant that a certain number of hay-fever sufferers are unquestionably people of "neurotic temperament," while others, without being at all neurotic, are of a certainty gouty, can we not profitably look beneath these titles and recognise the fact that they designate dyscrasia, which are merely different offshoots from a parent weed that is rooted in defective nutrition ? Is it not, therefore, to this primary departure from normal processes that we should address our corrective measures ? Of what use is it to administer to the neurotic individual the most potent of nervines, or to the gouty patient the best of antilithics, if underlying both of these conditions there is a cause upon which none of these remedies exerts a noticeable influence ?

There is no need to analyse the expression "defective nutrition" further than to state that it is meant to include all the phenomena of metabolism—constructive, destructive and eliminative. Disturbance of one of these means disturbance of all, and, as a final observation upon this subject, we may note the fact that with continued absorption of toxic materials from the intestinal tube, or with persistent incomplete elimination of the products of sub-oxidation, it is only a question of time when autotoxemia will provide us with any of the functional neuroses from hay-fever and asthma to chorea and epilepsy.

With this broad conception of the constitutional factor that shares in the genesis of hay-fever, its rational treatment will evidently demand far more than a mere juggle with drugs, be this ever so skilful. The end to be attained is the removal and checking of further production of every toxic body that can so enfeeble the nerve centers as to render possible this annual vasomotor

paresis that affects the intranasal circulation. The merely eliminative portion of this procedure is not a matter of great difficulty, but when we grapple with the problem of preventing further contamination of the blood current we find that it is no trifling task that we have undertaken. And this is so because our success so largely depends upon the intelligence of the patient and the fidelity with which he coöperates with us. To secure this coöperation, and retain it until the victory is gained, requires both tact and firmness. A sensible patient will not regard it as an evidence of weakness if we confess at the outset our inability to conquer the disease single-handed; and if he be well impressed with a sense of his own responsibility in the winning of the battle, he will seldom have to be coaxed or threatened in order that he shall do his share. I regard it as a means of saving time, temper and reputation to have a clear understanding with the patient, before the first blow is struck, as to what we will expect of him. The very essential restoration of the nose to a state of health is exclusively our own affair, and we can effect that unaided; but when it comes to restoring the patient's nutritive processes to functional perfection, to rehabilitating his more or less dilapitated nervous system, he must join with us in the struggle that it involves. The main battle-ground is to be his own gastro-intestinal tract, and, as he is to be the one sentinel throughout the conflict, much depends upon his constant vigilance and his strict obedience to orders.

One more word regarding the character of our enemy and we will abandon this figurative strain and descend to formal English. It is a host of hygienic blunders and, perhaps, wilful bad habits that we are to meet and overcome—self-indulgence (a term covering a multitude of sins), irregularities connected with the patient's hours for meals, for work, rest and play, indiscretions of diet, lack of exercise, objectionable fancies in matters of clothing and bathing, and, finally, vicious excesses—alcoholic, narcotic or sexual. All these make quite a formidable array and they are to be subdued not by any single brilliant bit of strategy, but only by a prolonged and unrelenting struggle that requires immense patience and determination. In considering the ways and means, I make it a rule in my lectures at the University of Pennsylvania to enter quite thoroughly into details,[1] but in these columns this is uncalled for, and I have only to emphasise certain points that I regard of special interest and importance.

1. University Medical Magazine, July, 1896.

The accurate adaptation of the diet to any inherited or acquired morbid state that the patient presents is one of the first essentials. It is not enough merely to reduce the starches and sweets if he be neurotic, or the nitrogenous foods if he be gouty—a shallow routinism would dictate that much; but the age, the sex, the occupation, the whole environment of the patient must be separately studied and provided for in the dietary scheme.

In the closest possible association with the regulation of food is that of exercise. By the majority of physicians scarcely anything is prescribed with less intelligence, with less apprehension of its possibilities for good or evil, than this agent. Judiciously advised, with careful reference to the condition and needs of the patient, it is worth all the drugs in the pharmacopeia. Iron is, indeed, a veritable specific for these cases of nervous and muscular asthenia, but it should be prescribed in the form of dumb-bells. Is it not an egregious folly to prefer the temporary and deceptive benefits of strychnine to the permanent and real ones that attend the proper use of the muscles? Is the passive cutaneous leakage that transpires in the hot-air chamber of a Turkish bath establishment to be compared in therapeutic value to the natural and healthful stimulation of the sweat glands that accompanies active exercise? I believe in nothing more firmly than that if a man takes care of his muscles his nerves will take care of themselves. And yet there is no closing our eyes to the fact that, to the average man, exercise is distasteful, is hard work, yea, even drudgery. It requires all the eloquence we possess to convince him, first, of its necessity, and then to persuade him to adopt and adhere to it. We are not, therefore, to be content with lightly telling him to "take a little more exercise," to walk where now he rides, or, in these days, to buy himself a wheel—and then to leave the manner of its use to his own unenlightened discretion. The more stress we lay on this portion of the treatment, the more explicit we are in our instructions concerning it, the more will the patient be impressed with its importance and the necessity for doing what he is told. In brief, then, it is in the skilful blending of diet and exercise, and their application in proper proportions to each of these patients, that we have the one rational and reliable method of removing the constitutional factor that is so active in the causation of hay fever. Within a reasonable time the digestive tract is restored to a state of sanitary purity, general nutrition is established upon a firm foundation, and the previously unstable nervous system, steadied

and invigorated, is enabled to resist such disturbing influences as once proceeded from the contact of atmospheric irritants with the hyperesthetic pituitary membrane; the vasomotor centers resume their domination over the nasal erectile structures, and the distressing phenomena of hay-fever are known no more.

Of course, that which I have written here concerning diet and exercise applies with equal force to both sexes and all ages. Certain modifications, it goes without saying, are to be made with respect to differences in sex, age and occupation; but the essential idea is to put the patient upon a course of strict training that will bring out all his capacity for self-denial and self-help, that will effect a most salutary change in his whole *morale*, and that will so completely remove the hyperesthesia of the nasal sensory nerves as to make them contemptuously indifferent to, even unconscious of, a species of irritant that once sufficed to throw them into a state of violent commotion. There is nothing brilliant, it is to be confessed, about this method of removing the constitutional factor, but for what it lacks in brilliancy it more than makes amends in certainty. It is, often enough, slow and tedious, but to patients possessed of grit and determination it brings a sure reward. It penetrates to and combats the very beginnings of pathogenesis, and with this fact in mind we can scarcely be over-confident in anticipating and prognosticating success.—*Therapeutic Gazette.*

Promiscuous Use of Handkerchiefs.—One of the commonest maladies is "cold in the head," or, as it is technically called, "coryza." It is notoriously infectious and the means of communication is the discharge from the nostrils. I am satisfied, from repeated observation, that this troublesome affection often spreads through a family of children and then through an entire household through the promiscuous use of the pocket handkerchief. A little child comes to the nurse with the request, "blow my nose." This is carelessly or thoughtlessly done with the parent's or attendant's pocket handkerchief, which has become infected and spreads the attack. In other cases the soiled pocket handkerchief is allowed to dry without disinfection and the dried discharge from the diseased mucous membrane of the nose is then diffused through the air, spreading the malady just as measles is spread.—Moore, in Proceedings of Dublin Sanitary Association.—*Med. Age.*

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REFORM IN EXPERT MEDICAL TESTIMONY.

FOR some time past there has been a feeling among many members of both the legal and medical professions, that the system in vogue in the courts relating to expert medical testimony is inadequate to meet the necessities of justice and often unfair to prosecution or defense—one or both. Recent celebrated cases tried in the courts, notably one that occurred in Batavia during the past summer, have served to stimulate renewed inquiry into the propriety of reforming the methods of practice by seeking amendments to the statutes through the legislature.

At the recent meeting of the Medical Association of Central New York, held at Buffalo, this subject was debated with intelligence by a number of physicians from a medical point of view, and by Tracy C. Becker, Esq., on the part of the legal profession. The subject was introduced through the report of a committee that was appointed last year. The report recommended a scheme for certain changes in the statutes, so as to require all medical testimony to be made in the form of a medical commission, which should investigate the case at issue and which should be paid by the state, not by either defendant or prosecutor. Dr. A. W. Henckell, of Rochester, followed the chairman of the committee and adduced some forcible arguments in favor of the course recommended by him and his colleagues, giving many instances in which the ends of justice had not been aided—even thwarted—by the present method of calling upon paid expert testimony. Mr. Tracy C. Becker, of Buffalo, went into the legal aspects of the present and proposed limitations of expert testimony and showed that many justices of the supreme court and eminent lawyers do not consider that expert

testimony should be allowed to rest in its present position. A reprint of all testimony in the possession of the association on this matter will be put into pamphlet form and distributed soon ; in the meantime the subject remains in the hands of the committee, which has merely reported progress.

It is to be hoped that the agitation of this subject, in such an intelligent form, will lead to the correction of abuses that grow out of the chaotic methods under present practices. Any man who has ever been a medical expert witness in an important trial at bar will appreciate the propriety of being relieved from that kind of embarrassing, not to say improper, cross-examination that a designing lawyer not trained to the gentlemanly courtesies of polite society may subject a witness.

One of the most delightful memories of the late Mr. Laning, who possessed many charming qualities of head and heart, was that he was always equally polite in the cross-examination of an expert witness as he was in the direct ; in other words, whether the witness was his own or his opponent's he always found courteous treatment at the hands of this distinguished lawyer. Mr. Laning never forgot that he was a gentleman even when subjecting a witness to a searching examination, which he was always sure to do if occasion demanded it. Were all lawyers like Mr. Laning perhaps the present system might not be as unjust in its application to trial cases.

That some change from the present system is needed all who have any knowledge of the subject are doubtless prepared to admit. The only question at issue relates to the method that should be adopted in its stead. A commission to be appointed by the court and paid by the state, seems to be the favorite plan with the majority who have expressed an opinion on the subject. Another proposition is to authorise a commission of three—the court, prosecution and defense each to appoint a member. In any event, the report of a commission, it seems to us, should be made in writing and be conclusive on the subject-matter with which it deals. At any rate, some plan should be devised to take out of the hands of the lawyers the opportunity to so cross-examine an expert witness as to apparently make him stultify himself or neutralise the effect of his testimony.

Most trials at law as now conducted seem to be adroit schemes for obtaining the miscarriage of justice. Even in civil actions the delays and perplexities are such that the victor is often worse beaten

than the vanquished. At the present day only the very rich or the very poor can afford the luxury, satisfaction or entertainment of a lawsuit. Wealthy persons can afford to squander a few hundreds on the chances of a verdict as a mere pastime, while the very poor find an occupation and sometimes a competency in the uncertain turn of the ballots in a jury box. The only proper course for a medical expert witness to pursue under the present system is to charge a fee sufficient to adequately compensate him for all the delays and annoyances to which he will assuredly be subjected.

It is to be hoped, however, that the agitation of this subject will continue until medical expert testimony shall be established on a basis creditable alike to the science of medicine and the art of law. The report of the committee of the Medical Association of Central New York, to be made at Auburn next year, will be looked forward to with much interest by all concerned in this much-needed reform.

TOPICS OF THE TIME.

A SUIT to recover $40,000 damages for alleged libel, brought by Joseph A. MacKeown, an optician of No. 24 East Forty-second street, New York, against Dr. Frank Van Fleet, who, in an address before the Medical Society of the County of New York, had spoken of him by implication as a quack, was tried recently in the United States Circuit Court before Judge Wallace and a jury.

Dr. Van Fleet is chairman of the committee on legislation of the Medical Society of the County of New York, and in the course of his official duty as such comes in contact with, and naturally incites the displeasure of, each and every person who is attempting to relieve human ills by irregular and illegal measures.

The remarks complained of were made in the course of a debate over the admission to the columns of *The Medical Record* of an advertisement of MacKeown's and was reported in the newspapers. In it Dr. Van Fleet said : "I have been told the case of a man, a druggist, who died of Bright's disease. He told me he had seen this advertisement in our journal and, thinking it had our indorsement, had his eyes treated for this trouble. I hold that the advertisement was the means of hastening his death at least. A man who says he can do all things this man says he can, can do more than any physician, and he is a quack. The medical journals are overrun with these meretricious advertisements, I am sorry to say, but I want our own to be free from them. It seems to me that

when a person not a physician advertises to cure headache, nervousness, sore eyes, neuralgia and other things by putting on glasses, then he violates the law as a quack. Such advertisements should be withdrawn from medical journals. If there is no legal right to withdraw them, then there is a moral right. The whole country is teeming with such quackery and, what is worst of all, when such advertisements appear in a medical journal, and especially in our own publication, it appears to have our indorsement."

Dr. Van Fleet, at the trial, testified in his own behalf that he did not know that reporters were present when he addressed the county medical society. He said that he spoke of MacKeown as he did for the reason that the latter advertised to do what he had no right to do, not being a licensed practitioner. Judge Wallace directed a verdict for the defendant.

Dr. Van Fleet is an able and fearless champion of the right and deserves to be continued on the legislative committee as long as he will consent to serve. The JOURNAL congratulates him upon winning the suit above referred to.

COMMENTING upon the death of a little child, treated by the so-called christian-science method, the *Peoria Medical Journal* says:

The recent occurrence in this city of the death of little Hazel Campbell has aroused a storm of condemnation and protest in the minds of the general, as well as the professional, public. In this is presented the instance of a bright and lovely child, allowed not only to die, but to suffer the agony of acute intestinal inflammation for want of that attention which medical science at the present day can readily furnish. It is well, perhaps, that such shocks be occasionally administered to the public consciousness, in order to arouse it to the sense of danger to which it is constantly exposed, but it is sad to contemplate the inhumanity and desolation of a home inflicted by such a blind and unreasoning adherence to a faith that is at best only a half truth.

The question in one of our city papers in this connection may well be asked: By what right are these people allowed to take a serious case like that and treat it? Physicians are required to pass an examination and hold a state certificate before they are allowed to practise their profession, yet these christian-scientists take a case, no matter how serious it may be, and are not touched by the law, even if the patient dies, as is the case every time, when there is anything ailing the structure of the body—anything worse than a mere functional nervous derangement, which can in a measure be removed or controlled by the hypnotic treatment given by the christian-scientists.

The question as to the duty of the state board of health in this connection is an important and serious one. The idea of exacting from one class of persons a qualification that is not exacted from another class for the self-same liberty is repugnant to all sense of justice and right, aside from the more important consideration of the welfare of the public. And yet that is exactly the status of matters in this state at the present time relative to the class of so-called healers, called "christian-scientists" by suffrage and the members of the general profession of medicine. That it is an outrage, pure and simple, on all concerned, is patent to anyone willing to give the matter even a moment's thought. That the state board of health will ever take any action in the premises is not at all likely.

In the case forming the text of the foregoing outburst, the coroner was called to take action, but refused finally to do so, with the statement that while he realised a great wrong had been done it was not his province to take any action, in that such move had been frustrated by calling in physicians just before death, the cause of which was certified to by them.

In scarlet fever patients it is a very important matter to determine how long after convalescence isolation should be maintained. James T. Neech, L. R. C. P., Edin., read a paper relating to this subject at the Montreal meeting of the British Medical Association, published in the *British Medical Journal*, September 25, 1897. The *Medical Review*, October 23, 1897, makes editorial comment upon the same and the importance of the subject is such as to justify us in making extended extracts from the same. Says the *Review*:

With a view of ascertaining the duration of infectiousness in convalescents from scarlet fever, Dr. Leech has gathered carefully prepared statistics in connection with cases while in hospital and the relation which their discharge from hospital bears to the occurrence of fresh cases in the district where they live. While the author admits that until the specific microbe of the disease has been isolated, its life history studied and the extreme limit of its retention in the human body experimentally proved, it will be impossible to pronounce with certainty how long after convalescence a given patient can be considered free from infection and incapable of conveying the disease. Until then physicians must be guided in dismissing patients from hospitals by the results of close observation, accurate records and carefully prepared statistics.

In this investigation the author has secured pretty accurate records of 15,000 patients and found that where the average period of isolation

was forty-nine days and under the return cases averaged 1.86 per cent.; where the average period varied between fifty and fifty-six days, the average percentage of return cases was 1.12 and where isolation extended to between fifty-seven and sixty-five days the average percentage was 1.0. Although the author would not like to lay too much stress upon these figures, yet they seem to point to the conclusion that the average period of retention in hospital bears a relation to the number of return cases of the disease. The author does not ignore the possibility that an individual might become infected from some unknown source and in each case this might be coincident with the return from hospital. The stowing away of infected articles belonging to a patient has been shown to be a cause of return cases, but with improved apparatus and more perfect and thorough methods of disinfection, this probably does not influence the number of return cases so much as formerly. Making due allowance, then, for a certain number of return cases from other sources, there is little doubt in the author's mind that discharged patients in a certain percentage of cases are the direct vehicles of infection.

The author's statistical research would seem to refute the idea that, as several eminent authorities believe, patients breathing the actively infected air of a hospital during convalescence store up infective material in the cavities of nose and lungs, and by that means convey the poison outside the institution. This may possibly occur, says the author, but were it the chief cause, would not the number of return cases be even greater than it is? Moreover, in that case the percentage would not be affected by prolonged hospital isolation.

The author calls attention to the fact that the infectious material circulating in the blood must be present, in all probability, in all the secretions of the body, also the feces and urine, and the latter should therefore be disinfected. The desquamating cuticle in scarlet fever owes its infectiousness to the excretion of the glands of the skin. In scarlet fever not only the glands of the neck but also the lymphatic glands in the axilla, groin and other parts become enlarged during the earlier stages of the disease. The author inclines to the opinion that the specific poison accumulates in these glands. Later the virus passes again into the blood-stream and is eliminated during convalescence by the emunctory organs.

That a purulent discharge from the nose, ear or running sore, the usual sequelæ and complications which necessitate a prolonged period of isolation, is infectious, has been proved beyond a doubt. The mere existence, however, of such discharges is not in itself capable of prolonging the infective period. It has not yet been shown that the cessation of the period of infectiousness and the healing of a discharging surface are coincident and the author does not think that such is always the case.

The completion of desquamation is not a safe and reliable guide as to when a patient ceases to be infective, even in cases where no complication arises.

In all acute infectious diseases, where the fluids of the body contain more or less of the specific virus, a certain time must elapse before that virus can be completely eliminated.

It appears that in scarlet fever conditions exist, at least in some cases, that considerably prolong the period of complete elimination. In this respect scarlet fever seems to differ from many of the other fevers; the idea has, therefore, suggested itself to the author that a storing up of the infectious material takes place somewhere in the body and this, perhaps, in the condition of spores.

The author recommends the establishment of convalescent wards in all fever hospitals and, with regard to the time of detention in scarlet fever, he thinks that a minimum of eight and a maximum of thirteen weeks will be sufficient until the contrary be shown by accurate methods based upon careful observation, or after the infectious agent has been proven to be a microörganism, by the study of the life history of the germ; in other words, by bacteriological methods.

By a printer's error the annual death-rate for the month of September, 1897, for the City of Buffalo, in the monthly bulletin of the deparment of health, was made to read 16.11 instead of 11.61.

Mr. Hall Caine writes interesting stories, but occasionally he gets his therapeutics somewhat mixed, as instanced by the following, taken from the *Bristol Medico-Chirurgical Journal* for September:

In Mr. Hall Caine's last novel, The Christian, some comical perversions of medical knowledge occur. For example, the weak-minded but beautiful Polly Love is killed off by a dose of "half a grain of liquor strychnine." This is, perhaps, not quite in accordance with modern pharmacology, but Mr. Caine unfortunately omits to mention anything about the chemist who weighed out the half grain of the liquid poison. In a medico-legal matter, again, Mr. Caine has established a record, and it is evident that we are quite wrong as to the definition of a still-born child, if this record is to be maintained. In The Christian the author describes a still-born child as "one that has breathed but never cried."—*Medical Press and Circular.*

Personal.

Dr. Ernest Wende, health commissioner of Buffalo, and Dr. F. C. Gram, registrar of vital statistics for the health department, attended the meeting of the American Public Health Association at Philadelphia, October 26-28, 1897, as official delegates from the Buffalo department of health.

Dr. Henry J. Mulford, of Buffalo, has moved his residence to the Markeen, corner of Main and Utica streets. His office remains at 466 Franklin street. His practice is limited to diseases of the nose, throat and ear. Hours, 10 a. m. to 12 m., 2 to 4 p. m. Sundays, 12 m. to 1 p. m.

Dr. Frank Whitehill Hinkel, of Buffalo, sailed for Europe early in October, expecting to spend several months in recreation and study. He will then return to his home and resume the practice of laryngology at his office, 305 Delaware avenue.

Dr. Stephen Smith, of New York, has been appointed by Mayor Strong a commissioner of charities to fill a vacancy. This is a most excellent appointment and will strengthen the board of charities in a marked degree.

Dr. William C. Krauss, of Buffalo, was elected president of the Medical Association of Central New York at its recent meeting held in this city. This is a fitting recognition of Dr. Krauss's ability and interest in the affairs of the association.

Dr. John E. Bacon, of Buffalo, announces his removal from 79 Niagara square to the Newport, 176 Prospect avenue, corner of Virginia. Telephone, Tupper 286. Hours, 8-10 a. m., 2-4 and 7-8 p. m.

Dr. Lorenzo Burrows, of Buffalo, has removed from 388 Franklin street to 482 Franklin street. His practice is limited to diseases of the eye and ear. Hours, 9 a. m. to 1 p. m.

Obituary.

Surgeon-general Newton L. Bates, United States Navy, died suddenly at the Shoreham Hotel, Washington, October 18, 1897, aged 59 years. Dr. Bates was an alumnus of Buffalo University Medical College, class of '61. Soon after graduation he entered the naval service as assistant surgeon and was attached to the naval hospital at New York. During the civil war he served on the "Seneca" with the South Atlantic squadron, in the naval laboratory at New York, and on the "Benton" with the Mississippi squadron. He was promoted to surgeon in 1865, was a member of the naval board of medical examiners from 1878 to 1880, and in 1881 was commissioned medical inspector. From 1880 to 1882 he was in charge of the naval hospital at Yokohama, and in 1888 he was advanced to the position of medical director. On October 1, 1897, he was appointed to succeed J. Rufus Tryon as surgeon-general and chief of the bureau of medicine and surgery in the navy department. He was compelled to take the oath of office in bed on account of illness, which was then supposed to be temporary in character.

Dr. Bates was an accomplished physician and a genial gentleman. His many amiable qualities attracted a large circle of friends and during his service he had been in every port in the civilised world, had met hundreds of distinguished people and was at graceful ease in the presence of everyone, whether a monarch or a private citizen. His loss will be deeply felt by his colleagues in the naval service, and especially will his demise come very near to the president of the United States, whose physician and friend he was.

Dr. Charles Willard Hamlin, of Middleville, died at St. Luke's hospital, Utica, October 6, 1897, aged 58 years. He was a son of Joseph S. Hamlin and was born at Holland Patent in 1839. He was educated first in the local schools, then at Whitestown seminary, and afterward at Albany, graduating from the normal school in 1861. He began the study of medicine in the office of Dr. D. A. Crane at Holland Patent, but soon afterward the civil war began and he enlisted in Captain Thorpe's company that was subsequently attached to the 57th regiment N. Y. V., raised in New York City. Soon afterward he was appointed hospital

steward of the regiment and it was in this capacity that the writer, having been assigned to duty as surgeon in that regiment in the winter of 1863, first made his acquaintance. Mr. Hamlin was one of the most faithful and conscientious soldiers, and though serving with the medical department his duties often took him into extreme danger, but he was absolutely fearless under fire, frequently going to the front line of battle and even to the skirmish line to succor the wounded.

After the war he completed his medical collegiate course at Bellevue, graduating in the class of '66. Dr. Hamlin established himself in practice immediately at Middleville, where early he obtained the confidence of the community and his professional colleagues. He was a member of the Medical Society of the County of Herkimer, of the Medical Society of the State of New York, and represented the latter as an official delegate in the first Pan-American Medical Congress, at Washington, in 1893. He was married September 12, 1867, to Miss Dora A. Varney, and his widow with one son, Dr. Varney B. Hamlin, of Clinton, survive.

Dr. Hamlin was the eldest of a family of eleven children and the first to die. The last time the Hamlin family was reunited was on the occasion of the golden wedding of the parents, which was celebrated in Holland Patent, September 18, 1888. Mrs. Hamlin, the mother, died February 18, 1896. The brothers and sisters of the deceased are: Mrs. James T. Hall, Chicago; Edward E. Hamlin, Oriskany Falls; Mrs. Cornelia Gosnell, Kansas City; Eugene Hamlin, Floyd; Frederick W. Hamlin, Chicago; George T. Hamlin, Watertown; Miss Adelaide Hamlin, Holland Patent, and William W. Hamlin, Des Moines, Ia. Joseph S. Hamlin, father of this family, is in his 88th year and resides at Holland Patent.

It has fallen to few medical men in Central New York to attain more conspicuous eminence than did Charles Willard Hamlin, who died in the midst of a successful career, in the vigor of a well-ripened manhood, lamented by loving relatives, warm personal friends and numerous citizens.

In another place in this edition we publish the proceedings of the Medical Society of the County of Herkimer at its memorial meeting.

Dr. Bedford Brown, of Alexandria, Va., died at his home in that city September 12, 1897, aged 76 years. He was born in North

Carolina and was the son of Senator Bedford Brown, who represented North Carolina in the senate many years ago. He began the practice of his profession in his native state, and at the outset of the civil war, in 1861, he entered the confederate army as a medical officer, where he rose to the rank of medical director. After the war he settled at Alexandria, Va., where he continued to reside until his death. He was a member of the Medical Society of the State of Virginia, president in 1886; of the Southern Surgical and Gynecological Association, president in 1893; member of the first Pan-American Medical Congress; of the American Medical Association, and honorary member of the Medical Society of the District of Columbia. He had also been a member of the Virginia State Medical Examining Board.

Dr. Brown was regarded with high esteem throughout the south, and very justly so, for he was a man of erudition, amiability of disposition, ability in his profession and spotless in his character. He will be greatly missed among his many friends and acquaintances, and especially in the Southern Surgical and Gynecological Association, where he was a conspicuous figure for many years.

Dr. Cornelius Kollock, of Cheraw, South Carolina, died at his home August 16, 1897, aged 73 years. He was graduated from Brown University in 1845, and from the medical department of the University in 1848. After spending two years in Paris he returned to this country and began the practice of his profession, which he pursued with continued and increasing success until his last illness. Dr. Kollock was one of the most prominent physicians in the south and had occupied many professional offices, among which may be mentioned the following: president of the Pee-Dee Medical Society for many years; of the South Carolina Medical Association in 1887; vice-president of the American Gynecological Society in 1892, and president of the Southern Surgical and Gynecological Association in 1894.

Dr. Kollock was widely known and greatly respected for his many qualities of head and heart—virtue, uprightness, ability, faithfulness and good companionship.

Dr. Walter J. Ransom, of Lockport, who died last August, was a man of more than ordinary ability, and a physician who commanded the respect of his colleagues, neighbors and acquaintances. His

demise in the midst of a life of usefulness and in the activity of his years is a sad blow to his family and to an extensive clientèle that he was serving so faithfully and well.

Medical College and Hospital Notes.

THE Medical Department of Niagara University, during the present school session, bids fair to have a course in bacteriology second to none in the state. Dr. William G. Bissell, bacteriologist to the health department of Buffalo, will have charge of the course, which will consist mostly of practical laboratory work. The course is intended to extend over a period of sixteen weeks, eighty hours of which time will be devoted entirely to practical laboratory work, with an additional eighteen hours of lectures. The bacteriological laboratory has been recently equipped with the most modern apparatus, including incubator, autoclave, sterilizers, microscopes, and the like, besides every facility for animal inoculation work. Dr. Bissell will be assisted during the course by Dr. U. B. Stein, who has but recently returned from Europe, where he had instruction in two of the most prominent laboratories; also by Mr. Baker and Mr. Ryan, former students of Dr. Bissell.

A cordial invitation is extended to members of the medical profession to attend the lectures, the opening one of which will be given Wednesday, November 3d, at 5 P. M., at the College building, 203 Ellicott street. The remaining lectures will be given on Friday of each following week at the same hour.

THE Buffalo Hospital of the Sisters of Charity training school for nurses held its first formal graduating exercises on Tuesday evening, October 5, 1897. Dr. Henry D. Ingraham presided and delivered an introductory address, in which he said the training school was organised about eight years ago and was the first instituted in a sisters' of charity hospital in the United States. Vocal music followed, given by Miss Cronyn, Miss Carbone, Dr. Mooney and ex-judge Lewis. The Rev. Francis Lobdell, rector of Trinity church, delivered the address to the graduates, in which he took occasion to refer to the importance of nursing as a calling and of ample preparation for the work; especially, he said, should a nurse be refined, educated and faithful. Dr. Mooney sung a tenor solo

and then Dr. Ingraham presented the diplomas in the following terms: "In consideration of your qualifications I present you, on behalf of the sisters and the hospital staff, these diplomas as a certificate of your ability. You thus become graduated nurses with all the honor, as well as all the responsibility, which the title implies. You will look for the ideal and endeavor to put it into the real, that you may become perfect women as well as perfect nurses."

The graduates are: Antoinette L. Weber, Hamburg; Mary C. Hoffman, Oneida; Anna E. Dunn, Owego; Helen S. Alt, Erie, Pa.; Rose E. Gill, Belfast; Ellen M. Ryan, Buffalo; Mary H. Kennedy, Buffalo. Following another quartette by Miss Cronyn, Miss Carbone, Dr. Mooney and Mr. Lewis, the Rt. Rev. James E. Quigley, D. D., Bishop of Buffalo, presented medals to the graduates and addressed them in a few well-chosen words.

Dr. Herbert U. Williams, professor of pathology and bacteriology at the Buffalo University Medical College, announces a course of four lectures on bacteriology, to be delivered upon the occasion of the opening of the new bacteriological laboratories at the college, to be illustrated in part by lantern pictures. The first lecture was given Monday, October 25, 1897, at 5 o'clock p. m., in alumni hall. Special invitations have been issued to the medical profession to attend the course, the receipt of one of which the Journal is pleased to acknowledge.

The Philadelphia Polyclinic and College for Graduates in Medicine will hold its fifth special week in ophthalmology commencing November 15, 1897, which will be devoted chiefly to ophthalmic operations. It will include lectures, demonstrations and clinics at the Polyclinic and other hospitals, with conferences at which the latest suggestions and special technique of the various operations will be discussed.

When not otherwise stated the work will be at the Polyclinic Hospital, Lombard street, between 18th and 19th streets.

The fee for the full course, including all clinical work, is $15; or for the special lectures, demonstrations and conferences (shown in italics on the roster) without the regular clinics, $5.

ROSTER.

Monday, November 15th.—9 A. M., *Retinoscopy*, Dr. Thorington; 12 M., The operative treatment of detachment of the retina, Dr. Wallace; 2 P. M., Clinic at Wills Eye Hospital—Cataract operations, Dr. Risley; 4 P. M., Clinical work, Dr. Schneideman, and clinical demonstrations and operations, at Blockley Hospital, Dr. De Schweinitz; 8 P. M., *Conference on operative procedures for glaucoma.*

Tuesday, November 16th.—9 A. M., *Removal of the lens for high myopia*, Dr. Jackson; 11 A. M., Clinical demonstrations at the Children's Hospital, Dr. Thomson; 12 M., *The operation of tenotomy*, Dr. Hansell; 2 P. M., Clinic at Wills Hospital—Cataract extraction, Dr. Jackson; 4 P. M., Operative technique, illustrated on animals' eyes, Dr. De Schweinitz and Dr. Veasey; 8 P. M., *Operations on the eye and lids.*

Wednesday, November 17th.—9 A. M., *The technique of cataract operations*, Dr. Carpenter; 12 M., *Use of the Röntgen Rays in ophthalmic surgery*, Dr. Sweet; 2 P. M., *Clinic at Wills Hospital*, Secondary glaucoma, iridectomy, Dr. Risley; 4 P. M., Clinical demonstrations, Dr. Schneideman; operations at the Blockley Hospital, Dr. De Schweinitz; 8 P. M., *Operations on the ocular muscles.*

Thursday, November 18th.—9 A. M., *Retinoscopy*, Dr. Thorington; 12 M., Clinical work, Dr. Hansell; 2 P. M., Clinics at Wills Hospital—Needle operations for cataract, Dr. Jackson; 4 P. M., *Operations on the ocular muscles for abnormalities of ocular balance*, Dr. Risley; 7 P. M., *Operative interference in orbital disease.*

Friday, November 19th.—9 A. M., *The refractive changes after corneal sections*, Dr. Jackson; 11 A. M., Clinical demonstration at Children's hospital, Dr. Thomson; 12 M., *Ocular asepsis and antiseptics*, Dr. Reber; 1 P. M., Clinic at Jefferson Hospital, operations, Dr. Hansell; 2 P. M., Clinics at Wills Hospital, strabismus, Dr. Risley; 4 P. M., *Opening the lachrymal passages*, Dr. Schneideman; 8 P. M., *The treatment of lachrymal obstruction.*

Saturday, November 20th.—9 A. M., *Antisepsis and sepsis in operations upon the eye*, Dr. Carpenter; 12 M., Traumatisms of the cornea, Dr. Haydon; 2 P. M., Clinics at Wills Hospital, operations, Dr. Jackson; 4 P. M., Treatment of incised wounds of cornea and iris-prolapse, Dr. De Schweinitz.

Society Meetings.

THE Medical Association of Central New York held its thirtieth annual meeting at Buffalo, Tuesday, October 19, 1897. The president, Dr. Edward B. Angell, of Rochester, took the chair at 10 o'clock and appointed the following committees: Reception, Drs. W. W. Potter, C. G. Stockton, W. C. Krauss, Edward Clark, F. C. Gram; business, Drs. Lucien Howe, John O. Roe, J. P. Creveling. He then delivered his annual address, entitled, The Hygiene of the Mind, published in full in this issue of the JOURNAL. The reading of scientific papers was continued until 1 o'clock P. M., when luncheon was served at the Ellicott Club, the members of the Association becoming the guests of the Medical Society of the County of Erie at this function. At 3 o'clock the reading of scientific papers was resumed and continued until 6 o'clock P. M. Dinner was served at the Iroquois to those remaining until evening, forty covers having been laid. Dr. J. W. Connellan, of Portland, Me., attended the meeting as an invited guest.

This was one of the most interesting and successful meetings in the history of the Association, and the proceedings, together with the papers read, will be published in the JOURNAL. The election of officers for the ensuing year resulted as follows: President, Dr. William C. Krauss, of Buffalo; vice-presidents, Dr. E. L. Mooney, of Syracuse, and Dr. E. S. Foreman, of Auburn; secretary, Dr. Charles A. Vander Beck, of Rochester, and treasurer, Dr. S. H. Elsner, of Rochester. The next meeting will be held at Auburn on the third Tuesday of October, 1898.

THE Mississippi Valley Medical Association held its twenty-third annual session at Louisville, Ky., October 4–7, 1897. Governor Bradley delivered the address of welcome on the part of the state and city. Dr. William H. Bailey responded in behalf of the medical profession of Louisville, thanking the governor for his cordial words of welcome. Dr. H. H. Grant, chairman of the committee of arrangements, announced the entertainments; Dr. Thomas Hunt Stucky, president of the Association, then delivered his annual address. The official badge of the Association was a unique design in oxydised sterling silver, in which was cast a portrait of Dr. Ephraim McDowell, of Danville. The address in medicine was delivered by Dr. John B. Shoemaker, of Philadelphia, and that on surgery by Dr. John B. Murphy, of Chicago. The reading of scientific papers occupied most of the time during the four days' sessions.

Among the social functions were dinners given by Drs. I. N. Bloom, T. H. Stucky, H. H. Grant, L. S. McMurtry and J. M. Mathews.

The following officers were elected for the ensuing year: President, Dr. John Young Brown, Jr., of St. Louis; vice-presidents, Dr. A. P. Buchanan, of Fort Wayne, Ind., and Dr. A. J. Oschner, of Chicago; secretary, Dr. Henry E. Tuley, of Louisville, and treasurer, Dr. Charles A. Wheaton, of St. Paul. The next meeting will be held at Nashville, on the second Tuesday in November, 1898.

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The Buffalo Academy of Medicine held meetings during the month of October as follows:

Section on Surgery.—Tuesday evening, October 5th, program: The ancestral basis of appendicitis, with specimens, by Dr. Woods Hutchinson; Report of a case of noma with recovery, by Dr. J. C. Thompson; Exhibition of cases, by Dr. Eugene A. Smith; Presentation of an apparatus for the after-treatment of suprapubic cystotomy, and exhibition of a case, by Dr. Ransom.

Section on Obstetrics and Gynecology.—Tuesday evening, October 12th, program: Shall we leave the uterus in situ in excision of the adnexa? by Dr. C. C. Frederick; Report of three cases of hydrocephalus, by Dr. L. Schröter.

Section on Pathology.—Owing to the fact that the meeting of the Medical Association of Central New York was held on this date the meeting of this section was omitted, and the members of the Academy were invited to attend the sessions of the Association.

Section on Obstetrics and Gynecology.—Tuesday evening, October 26th, program: Movable kidney, by Dr. Wm. G. Ring; discussion opened by Drs. Carpenter, Dowd and Congdon; Gonorrhea in women, by Dr. J. Henry Dowd.

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The Southern Surgical and Gynecological Association will hold its tenth annual meeting at St. Louis, November 9, 10 and 11, 1897, under the presidency of Dr. George Ben Johnston, of Richmond, Va. Dr. Johnston is a son of Senator Johnston, a nephew of General Joseph E. Johnston, and is one of the foremost surgeons in the south. The secretary, Dr. W. E. B. Davis, of Birmingham, is a leading abdominal surgeon and one of the most efficient society workers in the country. Dr. H. H. Mudd, of St. Louis, is chairman of the committee of arrangements and is laying plans for one of the most effective meetings that the Association has ever held.

Book Reviews.

A SYSTEM OF PRACTICAL MEDICINE. By American authors. Edited by ALFRED LEE LOOMIS, M. D., Late Professor of Pathology and Practical Medicine in the New York University, and WILLIAM GILMAN THOMPSON, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine in the New York University. Volume II. Philadelphia and New York: Lea Brothers & Co., Publishers.

This second volume of an American system of practical medicine (the first of which was noticed in the May edition of this journal) deals with diseases of the respiratory and circulatory systems, of the mediastinum, of the blood, of the kidneys, of the bladder and of the prostate gland. The consideration of diseases of the respiratory system occupies the first 325 pages of the book and the six contributors are S. Edwin Solly, Elbridge G. Cutler, Reginald H. Fitz, A. Lawrence Mason, William Whitworth Gannett and Herbert B. Whitney. The respiratory tract has rarely been so exhaustively considered with reference to its diseases as in this section and never more ably.

The next section, pages 327 to 633, is devoted to the consideration of diseases of the circulatory system and of the mediastinum. Elbridge G. Cutler writes of physical signs of cardiac disease, cardiac atrophy, cardiac rupture, acute and chronic myocarditis and the fat heart; Warren Coleman, of pericarditis and hypertrophy and dilatation of the heart; Alfred Lee Loomis, of endocarditis; Charles E. Quimby, of cardiac thrombosis and aneurism, morbid growths and parasites, hydropericardium, pneumopericardium, syphilis of the heart, wounds of the heart and foreign bodies of the heart; James T. Whittaker, of neuroses of the heart and of diseases of the blood-vessels; and finally, Irving S. Haynes discourses upon diseases of the mediastinum.

It is stated that the chapter written by Dr. Loomis on endocarditis is one of his last literary efforts. The subject is forcefully presented in the author's usual terse and graphic style and is one of the best expositions of the subject yet offered to the profession.

Diseases of the blood occupy the next section, which is contributed by Frederick C. Shattuck and Richard C. Cabot. The titles are: examination of the blood, plethora, anemia, leucemia, leucocytosis, Hodgkin's disease, and the blood in infancy.

In the section devoted to the consideration of diseases of the kidneys, Henry P. Loomis writes on nephritis, amyloid degeneration of the kidneys, and renal hyperemia; I. N. Danforth discourses upon pyelitis, renal calculus, hydronephrosis, renal tumors, renal abscess, perirenal abscess, renal parasites and neuroses of the kidney, while James Tyson tells us of abnormalities of form and position of the kidney and of renal inadequacy.

The last section treats of diseases of the bladder and prostate gland. In this I. N. Danforth again appears as an author, this time discoursing upon diseases of the bladder and prostatitis, while Thomas D. Coleman closes the volume with chapters on abnormalities of the urine and uremia.

From all this array of authors and titles it will be observed that the editors have been surrounded by a group of leaders in medicine, who have yielded them loyal aid in completing this great volume. It is illustrated on a fitting scale with numerous engravings and plates that amplify the text and are specimens of artistic worth. The literature of medicine has been greatly enriched by this volume.

TEXT-BOOK ON MENTAL DISEASES. By THEO. H. KELLOGG, A. M., M. D., Late Medical Superintendent of Willard State Hospital, etc., etc. Octavo, 792 pages; illustrated by original sphygmographic tracings and photographs of the different types of mental disorder. New York: William Wood & Co. 1897.

The appearance of this superb and exhaustive work is an honor to American psychiatry and a credit to the author who stands in the front rank of medico-psychologists. It embraces the results of many years' study in the various hospitals for the insane in which the author has been engaged and shows his skill and aptitude in dealing with perhaps the most abstract and subtle of all the medical sciences.

The author divides his work into two parts: Part I. dealing with general mental pathology, and Part II. with the special groups and the typical forms of insanity.

The chapters comprising Part I. treat of the history of insanity from the dawn of the Greek school of medicine to the present time—the statistics, nosology, etiology, the evolutions, stadia, clinical progression and termination of mental disorders, the psychical and somatic symptomatology, pathology, diagnosis, prognosis and treatment of insanity.

The author's classification of the insanities, on page 60, embraces all the older recognised and some of the new forms and is divided into two groups. Group A (etio-pathological) embraces the insanities with definitely assignable etiological and pathological relations, while group B (psycho-symptomatological) embraces those without definitely assignable etiological and pathological relations or, in other words, are the so-called psychoses, such as the manias, melancholias and dementias. Interesting in the classification is the number of toxic and diathetic insanities. A few years ago these insanities, arising from general systemic morbid states, were very few, limited almost entirely to alcoholism and morphinism; now, however, plumbism, hydrargyrism, oxycarbonism, cocainism, bromidism, etherism, chloroformism, chloralism, nicotinism, autointoxications, lyssa humana and infectious diseases must be included in the list, while under the diathetic the author

includes the phthisical, cancerous, podagrous, rheumatic, pellagrous, limopsoitosis, malarious, anemic, post-febrile and myxedematous forms. These classes are more etiological than separate forms of insanity, otherwise it would tend to confuse the status of insanity-expertism more than ever. The chapters in Part I. are intensely interesting and many important and suggestive facts are brought out, which cannot find place in a cursory review.

Part II. treats in the same entertaining way of the old recognised forms of insanity, and although but little new has been added to our conception of these forms, yet the author dresses them in a pleasing and attractive style, making them appear like new. The whole subject is brought down to the very latest time, and although remembering all the newer ideas and forms of treatment, still the author does not allow these novelties to overshadow the accustomed standbys.

William Wood & Co. are the publishers, which is guarantee enough of the make-up of the book. W. C. K.

A TEXT-BOOK OF DISEASES OF WOMEN. By CHARLES B. PENROSE, M. D., Ph. D., Professor of Gynecology in the University of Pennsylvania: Surgeon to the Gynecean Hospital, Philadelphia. Octavo, pp. 529. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

This book exhibits the personal opinions of the author based on an experience which has been considerable. It is intended for the medical student and the general practitioner of medicine who has little or no experience in gynecological work. The author has in most instances recommended but one plan of treatment for each disease; in this way he avoids confusing the audience the book is intended to reach. Only such facts of anatomy, physiology and pathology not found in the general text-books are included here, and then only when it appears important for the clear understanding of the subject dealt with.

There may be, doubtless are, those who will differ from the author on some or a number of the subjects considered in this volume, but none will question his clearness of understanding or expression. This makes the book a valuable one to consult, and when contrasted with others that leave one in doubt as to what procedure to adopt at a particular juncture, it must easily take rank with the best of modern text-books on gynecology.

There is no drouth at present of works on gynecology, and he must be a courageous man who would put forth another at this time; but when a man has something to say, then says it, and stops when he has finished, he will always be sure of attentive listeners. This is just what Penrose has done and his attentive audience must necessarily be a large one. We do not expect to enter into an analysis at this time of this work, but will embrace the opportunity to speak of two or three excellent points which impress us with especial force.

In describing the methods of examination the author is particularly clear and concise and has given appropriate illustrations in the various stages of procedure. Again, we have rarely seen injuries of the perineum and displacements of the womb as well handled as in this book. Here, too, the illustrations are most appropriate and amplify the text in the clearest possible manner. Even the novitiate, after reading these chapters, cannot fail to have a reasonably clear comprehension of the subject. Lacerations of the cervix are always difficult for the student to comprehend, especially as regards their repair, but they are here set forth in such a manner as to bring them within the comprehension of the dullest mind.

Passing now to the technique of operations upon the uterus and appendages we find a chapter of unusual interest, treated with intelligence and illustrated with great skill. Especially to be commended are the author's description and illustrations of vaginal hysterectomy.

Finally, a word of praise should be spoken of the size and make-up of the book. It is convenient to handle, the paper and type make it pleasing to the eye and the illustrations for the most part are of a high class.

THE NORMAL AND PATHOLOGICAL CIRCULATION IN THE CENTRAL NERVOUS SYSTEM (Myel-Encephalon). Original Studies by WILLIAM BROWNING, PH. B., M. D., Attending Neurologist to the Kings County Hospital and Consulting to the St. Christopher's Hospital for Babies, etc., etc. Small 8vo, pp. 171. Price, $1.50. Philadelphia: J. B. Lippincott Co. 1897.

The author has presented in an original and concise manner facts concerning the normal and pathological circulation of the central nervous system. Many of the chapters,—papers written by the author during the past ten years,—are here collected, systematised and made a part of a very interesting and instructive treatise. These serve as a basis and further observations and additions by the author and by others give a very clear idea of the encranial circulation and its disturbances. The first six chapters are anatomical and experimental; the remaining twelve take up the clinical and pathological aspects. The veins of the brain in the monkey have thus far received little attention and the author has gone into this question somewhat at length and has illustrated his research with two plates.

Regarding the value of lumbar puncture, the author says, page 59:

> As a diagnostic means—*e. g.*, in suspected meningeal hemorrhage, it is valuable and as an index of pressure it may also be worth noting.
>
> It is worth further trial: (*a*) as a passing relief in brain tumors not complicated with hydrocephalus; (*b*) as a substitute for trephining in progressive dementia; (*c*) in certain spinal troubles; (*d*) and possibly as a means of applying medication directly to the spinal meninges.

Time alone can tell whether these hopes will all be realised, but doubtless its future field of application will grow narrower as reports come in.

The closing chapters are devoted to clinical cases affecting the cerebral circulation and vessels and are well presented. It is, we believe, the first treatise devoted to this subject and is worthy of perusal and commendation. It is printed on good paper, excellently bound and a good example of the bookmaker's art.

W. C. K.

THE MENOPAUSE. A consideration of the phenomena which occur to women at the close of the child-bearing period, with incidental allusions to their relationship to menstruation. Also a particular consideration of the premature (especially the artificial) menopause. By ANDREW F. CURRIER, A. B., M. D., New York City. Duodecimo, pp. xvi.—309. New York: D. Appleton. 1897.

The subject of this book is an interesting one. It is one also that is too little understood or too greatly misunderstood by the great majority of physicians. Dr. Currier is a painstaking writer and he has chosen for his title a subject that he well understands and one in which he has given a vast amount of information. Every general practitioner of medicine should study it with unusual care. It is to such that the majority of women suffering from ills, fancied or supposed, relating to the menopause usually apply. Dr. Currier has conferred lasting benefits upon physicians and patients in presenting his well-timed and scholarly work.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume II. Seventh series. 1897. Octavo, pp. xii.—371. Philadelphia: J. B. Lippincott Co. 1897.

If the value of these clinics is based upon the lecture of G. Ernest Herman on the treatment of puerperal eclampsia they would play a small part in literature of medicine. By quoting Herman's

definition of eclampsia our readers will fully comprehend the force and import of the foregoing remark.

Herman says: "By puerperal eclampsia I understand epileptiform convulsions in a pregnant, parturient or puerperal woman whose urine is solid with albumen." The lecture abounds with expressions equally as valueless and quite as misleading as is this one.

But, happily, there are others on which to base a judgment of value. The average of the volume, though somewhat below many of its predecessors, yet contains much that will interest and instruct the reader. The clinics have come so irregularly to us of late that we find the thread somewhat broken and had begun to wonder if they had been discontinued. It, however, appears that they are still alive, as indicated by the one before us.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XI. Diseases of the Nervous System. New York: William Wood & Co. 1897.

This volume is devoted to diseases of the spinal cord, cranial and peripheral nerves, and is ably edited by L. Bruns, of Hanover, Germany, Drs. F. X. Dercum, Lightner Witmer, James Hendrie Lloyd, and Charles K. Mills, of Philadelphia, Paul J. Möbius, F. Winscheid, of Leipsic, and Adolf von Strümpell, of Erlangen.

By far the greater portion of this volume is edited by Dr. Lloyd, who writes on diseases of the cerebro-spinal and sympathetic nerves. The chapters on the trophoneuroses is ably written by Dr. Mills; scleroderma, acromegaly and adiposa dolorosa by Dr. Dercum; diseases of the spinal cord by L. Bruns and F. Winscheid; tabes by P. Möbius, and the combined system diseases of the spinal cord by Adolf Strümpell and the chapter on pain by Lightner Witmer.

The discussion of these subjects is very thorough and scientific and the authors review the literature of the subject to date.

The appearance and typography is similar to the other volumes of this series.

THE LIVER OF DYSPEPTICS and Particularly the Cirrhosis Produced by Auto-Intoxication of Gastro-Intestinal Origin. By DR. EMILE BOIX, of Paris. Authorised translation from the latest French edition by PAUL RICHARD BROWN, M. D., Major and Surgeon U. S. Army. New York: G. P. Putnam's Sons. 1897.

With improved knowledge relating to systemic intoxication comes the necessity for increased facilities to differentiate, diagnosticate and eliminate. In other words, we experience in the daily practice of medicine an evergrowing necessity for improvement in our methods of treating gastro-intestinal disorders. The liver is

an old offender and has been made the scapegoat for the ignorance of physicians since a very early day.

In this work the dyspeptic liver is handled by a man of science on a scientific basis. There is no reason why every physician should not familiarise himself with the anatomic, pathologic and pathogenic conditions of this organ and learn how to diagnosticate and treat them. This work of Boix will be found an intelligent aid toward the accomplishment of that purpose. It is one of the best monographs that has been issued in regard to the liver and its diseases and no man can expect to master the dyspepsias until he has familiarised himself with the subject dealt with in this volume.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES AND ANALYTICAL INDEX. A yearly report of the progress of the general sanitary sciences throughout the world. Edited by CHAS. E. SAJOUS, M. D., and seventy associate editors, assisted by over 200 corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps, in five octavo volumes of about 500 pages each. Philadelphia: F. A. Davis & Co., publishers. 1896.

The new features introduced into this series of the annual are of commendable worth. The length of the abstracts has been increased the better to convey an author's meaning and this has made it necessary to rearrange the entire text. The associate editors have in many instances added personal comments to the articles to which they have attached their initials. Comments bearing no initials were written by the editor. This improvement, in the form of the abstracts, has involved the addition of more than half a million of words.

An analytical index and cyclopedia of treatment, filling about 350 pages, has been added for the benefit of overworked physicians who may not have time to consult more lengthy articles. There are a number of minor improvements which help to increase the general value of the annual.

The JOURNAL has heretofore stated its opinion of the annual, and it only needs here to reaffirm its former judgment with the added statement that the editor and his assistants and associates have year by year widened its scope and improved its material until the series of 1896 has become as near perfect as it is possible to make such a vast work.

REPORTS OF INSPECTIONS OF NATIONAL, STATE AND LOCAL QUARANTINE STATIONS. From annual report Marine Hospital Service. Washington: Government Printing Office. 1897.

This extract of the supervising surgeon-general's annual report contains whatever is of special interest in it pertaining to public health. Sanitary officers will be particularly desirous of obtaining it for the scientific quarantine information it contains. The government at Washington ought to issue bulletins on scientific medi-

cal subjects at short intervals. It is hoped that in the near future a Minister of Health will be accorded a seat in the cabinet, with ample power to disseminate information and promulgate orders that will conserve the public health in the best manner known to science. Meanwhile, we must be content, even glad, to receive such bits of official scientific information as such reports as this afford us.

THE AMERICAN TEXT-BOOK OF OPERATIVE DENTISTRY. In contributions by eminent American authorities. Edited by EDWARD C. KIRK, D. D. S., Professor of Clinical Dentistry, University of Pennsylvania, Department of Dentistry. Philadelphia and New York: Lea Brothers & Co., Publishers.

The practice of dentistry has improved so much within the past ten years that its literature must necessarily be rewritten because much of it has become obsolete. Dentists, like doctors, must now have passed through preliminary training, fixed collegiate courses, and final examination by the state after graduation, before they can be licensed to practise.

This work is written to supply the necessities of advanced training and education. The editor is an experienced dentist, as well as a competent teacher, and he has surrounded himself with an able group of contributors. The practising dentist will necessarily rely upon this work for much-needed advice in doubtful cases and the student will also find in it just what he requires in his early studies. It is well illustrated and printed on excellent paper with good-faced type. It will easily become adopted as a text-book in all the dental colleges and, necessarily, must be found on the shelves of every progressive dentist.

MEDICAL AND SURGICAL REPORT OF THE PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK. Volume II. January, 1897. Edited by ANDREW J. MCCOSH, M. D., and WALTER B. JAMES, M. D. New York. 1897.

This report, bound in boards, contains 172 pages and is one of the most elaborate and complete reports issued by any hospital within our knowledge. The book contains nothing but scientific matter and is well edited and printed. There are twenty-six articles and about fifty illustrations; many of the latter are devoted to the rooms and instruments relating to surgical technique. It is a book that may well serve as a model for hospitals. Too little attention is paid to these reports as a rule by members of hospital staffs and they are rarely bound in a form that permits of their preservation in the library.

BOOKS RECEIVED.

A Text-Book of the Practice of Medicine. By James M. Anders, M. D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia;

Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, etc. Octavo, pp. 1287. Illustrated. Price, cloth, $5.50 net; sheep or one-half morocco, $6.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

A Manual of Medical Jurisprudence. By Alfred S. Taylor, M. D., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital, London. New American edition of 1897 from the twelfth English edition. Thoroughly revised by Clark Bell, Esq., of the New York Bar. In one octavo volume of 831 pages, with fifty-four engravings and eight full-page plates. Cloth, $4.50; leather, $5.50. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

Cutaneous Medicine. A systematic treatise on the diseases of the skin. By Louis A. Duhring, M. D., Professor of Diseases of the Skin in the University of Pennsylvania, etc. Octavo, pp. 223-494. Part II. Classification; anemias; hyperemias; inflammations. Illustrated. Philadelphia: J. B. Lippincott Co. 1898.

Pathological Technique. A practical manual for the pathological laboratory. By Frank B. Mallory, A. M., M. D., Assistant Professor of Pathology, Harvard University Medical School; Assistant Pathologist to the Boston City Hospital; Pathologist to the Children's Hospital and the Carney Hospital, Boston, and James H. Wright, A. M., M. D., Director of the Laboratory of the Massachusetts General Hospital: Instructor in Pathology, Harvard University Medical School. Octavo, 397 pages, with 105 illustrations. Price, cloth, $2.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

Traumatic Injuries of the Brain and Its Membranes. With a special study of pistol-shot wounds of the head in their medico-legal and surgical relations. By Charles Phelps, M. D., Surgeon to Bellevue and St. Vincent's Hospitals. Octavo, pp. xiv.—582. With forty-nine illustrations. New York: D. Appleton & Co. 1897.

A Manual of Legal Medicine for the use of Practitioners and Students of Medicine and Law. By Justin Herold, A. M., M. D., formerly Coroner's Physician of New York City and County, etc., etc. Octavo, pp. xv.—678. Philadelphia: J. B. Lippincott Co. 1898.

Lectures on the Malarial Fevers. By William Sidney Thayer, M. D., Associate Professor of Medicine in the Johns Hopkins University. Small octavo, pp. vi.—326. New York: D. Appleton & Co. 1897.

Essentials of Bacteriology: being a concise and systematic introduction to the study of microörganisms, for the use of students and practitioners. By M. V. Ball, M. D., Bacteriologist to St. Agnes' Hospital, Philadelphia. Duodecimo, pp. xvi.—218. Third edition, revised. Illustrated. Price, $1.00. Philadelphia: W. B. Saunders, 925 Walnut street.

A Practical Treatise on Sexual Disorders of the Male and Female. By Robert W. Taylor, M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one handsome octavo volume of 448 pages, with seventy-three illustrations and eight plates in color and monochrome. Cloth, $ 3.00 net. New York and Philadelphia: Lea Brothers & Co.

The Essentials of Obstetrics. By Charles Jewett, M. D., Professor of Obstetrics in the Long Island College Hospital, Brooklyn, New York.

In one handsome 12mo volume of 356 pages, with seventy-eight illustrations and three colored plates. Cloth, $2.25. New York and Philadelphia. 1897.

Incompatibilities in Prescriptions. For students in pharmacy and medicine and practising pharmacists and physicians. By Edsel A. Ruddiman, Ph. M., M. D., Adjunct Professor of Pharmacy and Materia Medica in Vanderbilt University. Octavo, pp. 267. Price, $2.00. New York: John Wiley & Sons; London: Chapman & Hall, Limited. 1897.

Literary Notes.

The first annual report of the state board of medical registration and examination, of Ohio, is an interesting and instructive document of 179 octavo pages, besides thirty-six pages of preliminary matter. The latter record the proceedings of the board at its several meetings, while the former contain the statutes of Ohio relating to the practice of medicine and surgery now in force, as well as those that are obsolete; the official register of physicians by counties; the index to the official register and an alphabetical list of midwives. The report indicates an enormous amount of work performed by the board during its first year. It is presumed that it will be less onerous during succeeding years. The report should be in possession of every state examining board.

The *Bulletin* of the Harvard Alumni Association, Number 11, contains the report of the seventh annual meeting, held at Boston, June 29, 1897. Besides routine matters it contains the several speeches made at the annual dinner and much other interesting material. Typographically it is a model brochure and should serve to stimulate the publication of their proceedings by other alumni associations.

The *National Medical Review*, of Washington, D. C., has passed into the editorial control of Drs. Thomas E. McArdle and George W. Johnston, both capable and experienced physicians and medical writers. The former editor, Dr. Charles H. Stowell, has gone to Boston to engage in literary work. We bespeak for the *Review* a continuation of its success on enlarged and broadened lines.

The *Medical Council*, of Philadelphia, has changed its address to the northeast corner of 12th and Walnut streets.

THE *National Hospital and Sanitarium Record*, published at Detroit, Mich., is one of the additions to the periodic literature made during the month of September.

Edwards's Journal of Health, edited and published at Atlantic City, N. J., by Dr. Joseph F. Edwards, issued its first number in October. The editor was formerly attached to the *Annals of Hygiene* in a similar capacity and promises that this new venture will even surpass the *Annals* in interest and value. The first number certainly presents a fine appearance.

Miscellany.

ADULTERATION OF FOOD AND DRUGS.

THE Secretary of Agriculture, in pursuing an inquiry into the subject, has issued the following circular :

UNITED STATES DEPARTMENT OF AGRICULTURE,
DIVISION OF CHEMISTRY,
WASHINGTON, D C., September 17, 1897.

Dear Sir—Under authority of Congress, the department of agriculture is investigating the extent and character of food and drug adulterations and is desirous of securing all the information possible on the subject. Having been appointed special agent to inquire into and report upon this matter, the undersigned writes to request that you kindly furnish the Department under the inclosed franks all the information you have in regard to adulterations, together with any suggestions as to the best remedy for the evil.

1 Do you know of any new adulterant ? If yes, state what and how used.

2. Would a national food and drug law assist in preventing adulteration ?

3. Would uniform food, drug and pharmaceutical laws tend to promote efficiency and purity ?

4. Please suggest what would best promote the interests of consumers and legitimate manufacturers and dealers ?

5. What is your opinion as to the extent of damage done legitimate business by imitation of brands, packages, and the like ?

6. To what extent do sophistication, misbranding and injurious adulteration exist ?

7. Have state laws aided in preventing adulteration ? To what extent ?

8. Would a national law assist state officials in properly executing the local laws ?

9. Have adulteration, sophistication and misbranding increased or decreased ?

Prompt replies to the above, together with any other information or suggestions, will be highly appreciated.

Yours respectfully,

A. J. WEDDERBURN, *Special Agent.*

The circular bears the approval of the secretary, together with the request that answers be written on the reverse side of the circular and returned to the special agent.

SHAKESPEARE REVISED.

By D. S. MADDOX, M. D.

(From the *Quarterly Medical Journal*, Sheffield, England.)

"Constipation, thy name is woman."—*Hamlet.*

"Nature hath made strange cures in her time."—*Merchant of Venice.*

"Take each man's fee, but reserve thy diagnosis."—*Hamlet.*

"How poor are they that have not patients!"—*Othello.*

"He jests at physic that never felt a pain."—*Romeo and Juliet.*

"Why should the poor be pauperised."—*Hamlet.*

"Consultation oft loses both fee and patient."—*Hamlet.*

"It is a wise doctor that knows his own patient."—*Merchant of Venice.*

"Give every man thy prescription, but few thy medicine."—*Hamlet.*

"Doctors wax poor when patients prove unkind."—*Hamlet.*

"All the world's a clinic,
And all the men and women merely patients."—*As You Like It.*

"Thou art not so unkind
As a patient's ingratitude."—*As You Like It.*

"He that is not guilty of taking his own physic shortens not his own life."—*Hamlet.*

"Oh! me, what doctor that roars so loud,
And thunders in the index?"—*Hamlet.*

"I do much like her. She doth think she has
Strange lingering diseases."—*Cymbeline.*

"A double fee is a double grace,
Occasion smiles upon a second call."—*Hamlet.*

"What misadventure is so early up,
That calls the doctor from his morning's rest?"—*Romeo and Juliet.*

"If it were opened when 'tis opened, then 'twere well it were opened quickly."—*Macbeth.*

"Make all our trumpets talk, give them more wind,
Those clamorous harbingers of check and sound."—*Macbeth.*

"And all our theories have lighted fools
The way to dusty death."—*Macbeth.*

"What damned error, but some sober brow
Will approve it, and it with a case."
—*Merchant of Venice.*

"The remedies thou hast and their adoption tried,
Apply them to thy case with zeal,
But do not kill thy patients with experiment
Of each new-hatched unfledged medicine."—*Hamlet.*
—*The Cincinnati Lancet-Clinic.*

BUFFALO MEDICAL JOURNAL.

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Original Communications.

THE PHILOSOPHIC SPIRIT IN SCIENCE.[1]

BY MONTGOMERY A. CROCKETT, M. D., Buffalo, N. Y.

WHATEVER one's occupation may be there ever exists the danger of forming too narrow conceptions of life and of overlooking or disdaining those things which seem to lie beyond the limits circumscribing our own activities. It is often claimed that the pursuit of science counteracts this tendency toward narrowness; that the student of biology or medicine develops a broadness and liberality of mind in sharp contrast to the mental attitude displayed by those who busy themselves with other lines of work. By no means would I deny that a liberalising influence flows from the study of natural science, but, alas! only too often its effects are not manifest. The pathologist is much too apt to live within his own microscopic field; too frequently the chemist overlooks what lies beyond the reactions in his test-tubes and the physiologist too often expresses scorn for whatever cannot be demonstrated by his experiments or dissections.

You all know the bicycle scorcher, the man whose range of vision is limited by the patch of ground beside his wheel. For him there are no beauties in the landscape and the success of his excursions is measured by the number of miles recorded on his cyclometer. I fear many a man of science is as limited in his view, so busy registering facts in his particular field that he sees no beauty nor meaning in the landscape beyond. A broad view cannot be obtained without effort; it is often a hard climb to reach the uplands and yet we must ascend some height before we can understand the valley in which we live.

> "Unless above himself he can
> Erect himself, how poor a thing is man."

1. Opening lecture delivered at the University of Buffalo, September 13, 1897.

During the coming academic year most of you here present will be regaled with facts to the utmost limits of your intellectual digestions and upon this opening night I would not be guilty of inflicting upon you a didactic lecture, therefore I have chosen for my subject The Philosophic Spirit in Science. I wish to invite you onto some height where our view may be broad and from which we may observe some of the lights and shadows which give to the fields of science their impressive beauty. If at times you find the path upward steep and difficult, I beg you to have patience, for I trust the grandeur of the prospect will make you forget the hardships of the ascent.

When the subject of philosophy is mentioned the man of science is prone to display symptoms either of impatience or amusement, thereby illustrating how keenness of insight in one direction may be combined with obtuseness in some other, for philosophy and science are bound together by the closest of family ties. Philosophy represents the effort to explain the meaning of things and I imagine there is no one here present who at times has not philosophised. The facts in your life, your obligations and your experiences, with more or less of the material world must rush over you at times and would overwhelm you did you not think about them and introduce into them some sort of order and meaning. Some kind of a philosophy every one who thinks at all must have ; the question is, what kind ? Shall it be a crude, obsolete, self-contradictory affair ? or will you make use of the ground won by that magnificent army of thinkers in the past and join your thought to theirs ?

At the very dawn of reason, man's religion expressed his attitude toward that world in which he found himself and he soon began to ask the meaning of that universe in which he "lived, moved and had his being." The questions which nature forced upon his mind could find no answers without the data furnished by scientific investigation ; thus philosophy, which was "the child of religion, became the parent of the sciences." The philosopher does not claim to possess any superhuman power by which he can unlock the secrets of the universe ; for him the facts of science are the materials with which he works. You, therefore, can understand why philosophy has been called "the science of the sciences" and the Spencerian definition of philosophy as the last and highest unity of scientific knowledge.

It might be urged at this point that the philosopher is engaged

upon a hopeless task, for not only does so much remain to be discovered, but no mind can contain the number of facts already recorded. We must frankly admit the human limitations of the philosopher, but is he in any worse plight than the chemist, for instance? No chemist would claim that he knows all of his subject or that the time will ever come when he can rest from his labors because nothing more remains for investigation. The term chemist simply defines a worker upon a certain problem whose solution is by no means guaranteed. Happily, the philosopher is engaged upon an endless task, for when the final and complete system of philosophy is reached it will mean that all the data of the universe have been obtained and nothing more is left us but to sink into a condition of everlasting inertia. Science, wonderful as are its advances, raises more problems than it settles. Man's curiosity is so deeply reflective that the more he picks up pebbles from the shore of the great ocean of the unknown, the more pressing and numerous become the questions as to their meaning. What makes the philosopher is the appreciation of the problem which he sets himself and the spirit in which he attacks it. The value of that spirit for every scientist is what I wish to indicate.

A few instances taken from the physiology of sensation afford striking examples of the way in which investigations in a scientific field bring us face to face with profound philosophic questions. Suppose you prick your finger with a pin, what happens? You talk about a nervous impression being carried upward into the brain, but what is meant by that? You mean that a molecular vibration has been set up in the nerve and that this vibration is communicated from one cell to another until the cells in the brain also take part in the disturbance. Now, this vibration is what we call nervous energy and like all energy or force is some form of motion. Briefly stated, then, what is conveyed to the brain by your pin-prick is simply a mode of motion.

As soon as this motion reaches the brain it gives rise to a certain particular form of consciousness which we designate as pain. Isolate your sensory nerve or administer an anesthetic and your subject will feel no pain. I think you will readily admit that the reality of pain consists in being experienced by me or by some other sentient being, and that if no one in the universe ever experienced it we would be quite safe in saying that pain did not exist. Suppose now that you roll the pin between your fingers; again a molecular movement in the nerve is propagated to the brain and

you have the consciousness of what you call hardness. Now this hardness, like the pain, you know only as a state of your consciousness and yet you proceed to extradite this sensation into a quality of the pin. From an analysis of the mechanism of the two processes why haven't I as perfect a right to say that the pain, as well as the hardness, is a quality of the pin, or, on the other hand, to say that the hardness, like the pain, has no real existence except in being experienced by a conscious mind ?

Again, take the sensations of color and sound. You know what is meant by light and sound waves. These vibrations are transmitted through the optic and auditory nerves and somewhere within the dark recesses of the skull, this motion becomes translated into terms of consciousness. At any point along the line between the outside object and yourself we find nothing but vibrations and mere vibration by itself is neither color nor sound ; until translated into some form of consciousness these vibrations have no more meaning to you than Egyptian hieroglyphics. On what possible ground are you going to sustain the existence of colors or sounds independent of some perceiving mind ? What we call phenomena are products of a something acting upon a self ; we do not see our eyes in the process of seeing nor among the things seen, and in much the same way we overlook the part played by mind in producing the phenomena which we investigate. It is not my purpose to discuss the solutions of any of the difficulties which we have raised, but, on the contrary, to leave you with a keen appreciation of them, so that you can understand how science suggests them. The study of the physiology of sensation prominently brings forward one thought, that after all our world is what we make it, for our mind acts as the interpreter.

The materialist may tell you that matter thinks, but he never yet has succeeded in getting thought and feeling out of motion except by begging the question which he set out to prove. If you ask him what matter is, he proceeds to describe certain forms of consciousness, such as color, consistency, form and the like, so that instead of starting with matter to show you mind, he really has started with mind to show you matter.

From what has been said you will not be surprised that so many of the great philosophers were scientists. Let me mention a few names at random : Descartes, who is often called the father of modern philosophy, was a physiologist of note ; John Locke, author of the famous essay, Concerning Human Understanding, studied

medicine; the great Immanuel Kant was the formulator of the Nebular Hypothesis; Lotze, one of the most famous of recent German philosophers, was a physician and wrote extensively upon physiology and pathology. Huxley's scientific work must not make us forget how much he was interested in philosophy and, finally, Herbert Spencer had the technical training of a civil engineer and a wide knowledge in general science besides. A working acquaintance with some branch of science is indispensable for the proper cultivation of scientific method and judgment, but without the true philosophic spirit even the man so trained becomes but a poor philosopher and a shallow scientist.

There is a department of philosophy known as metaphysics which concerns itself with the discussion of what lies at the basis of all science, and I have heard men of science speak of metaphysics as if that subject represented everything that was absurd and useless. But the scientist makes very heavy demands upon metaphysics and it is rather amusing to hear a man condemn a commodity of which he himself is a large consumer. Causation, matter, motion, law, interaction and the like, are fundamental assumptions of all science; they are the coins used in all scientific transactions; metaphysics enquires as to their value and rejects counterfeits; metaphysics represents a struggle towards correct thinking, which is obtained only through persistent and strenuous effort.

Our senses furnish us with the material upon which the mind works and all we know can be expressed only in terms of ideas. When you use the phrase "I have no idea," you mean you don't know. The greatest conceptions of science are not given in sensation, but are hypotheses formed for the purpose of explaining our states of consciousness. We would have a very small world were we confined to the world of sensation. Did one of you ever see those atoms and molecules which play such important rôles in science? No, these are hypotheses which reason makes, in order to explain our experiences with what we call matter. Not only do the senses not confirm, but, at times, they seem to give evidence directly contrary to some of our fundamental assumptions.

Take the theories in astronomy as instances. Our senses tell us that we and all the stars are at rest and they justify the term sunrise and sunset. How astounding to be told that we are on a rotating ball which is hurled through space at the enormous speed of nineteen miles a second! Our senses limit us to appearances and

they have been called man's arch deceivers. The visible heavens we see with our eyes and we at once proceed to go behind the sensible phenomena into the domain of reason, where we construct the hypothesis known as the astronomical heavens, in order to explain our sense experience. Tyndall, after pointing out how we habitually form images of the ultrasensible in order to explain phenomena, says, "In their different powers of ideal extension consists, for the most part, the difference between the great and the mediocre investigator."

It is very evident, then, that metaphysical discussions are of vital importance to the man of science, for they consist in reasoning about his hypotheses and testing them in order to find out whether or not they are contradictory and whether they logically fulfill the demands made upon them. It is a pity that the average scientific man is not subjected to a little metaphysical discipline so that he might appreciate the "lively metaphysical postulates rampant amidst his most positive and matter-of-fact notions" and avoid making some rather sorry exhibitions of himself. Huxley well sums up the matter when he says, "Of all the dangerous mental habits, that which school-boys call cocksureness is probably the most perilous; and the inestimable value of metaphysical discipline is that it furnishes an effectual counterpoise to this evil proclivity. Whoso has mastered the elements of philosophy knows that the attribute of unquestionable certainty appertains only to a state of consciousness so long as it exists; all other beliefs are mere probabilities of a higher or lower order. Sound metaphysics is an amulet which renders its possessor proof alike against the poison of superstition and the counterpoison of shallow negation."

From these remarks about metaphysics, I think you can understand why the philosophic spirit is so keenly critical and why it may lead to scepticism. The philosopher takes your pet theories, your tenderest beliefs and subjects them to the deepest scrutiny. The tests which he will bring forward come not from the sense world, but from the domain of reason; he will wish to know whether the hypothesis reasonably explains the sense impressions. The only objections against the atomic theory to which the physicist would give ear would be those questioning its rationality either in respect to its implications or in its relations to the facts demanding explanation. Doubt is not a thing to be dreaded, but an instrument to be used. There are sceptics who doubt merely for the sake of doubting and for them the philosopher has no use. Doubt

in itself is no argument against an hypothesis; the sceptic must meet the demands of rationality quite as completely as the believer.

Descartes began his philosophic investigations by doubting everything which he could, but he did this in order to reach solid ground underneath; he doubted because, as he says, "I always had an intense desire to learn how to distinguish truth from falsehood, in order to be clear about my actions and to walk surefootedly in this life." A recent writer (Royce) says "philosophical thought that was never sceptical is sure not to be deep. The soul that has never doubted does not know whether it believes, and, at all events, the thinker who has not dwelt long in doubt has no right to rank high as a reflective person. In fact, a study of history shows that if there is anything that human thought and cultivation have to be deeply thankful for, it is an occasional but truly deep and fearless age of doubt. You may rightly say that doubt has no value in itself. Its value is in what it leads to."

It is well for the man of science to imitate the philosopher in the matter of scepticism. I do not need to dwell upon the fact that every new scientific theory passes through the fiery furnace of doubt. Dr. Whewell says that every great discovery passes through three stages. First, people say "It is absurd," then they say "It is contrary to the Bible," finally they say "We always thought so." How much wrangling do we see among scientists arising from "envy, malice and all uncharitableness." We hate to see our pet theories overthrown and are much too eager to attack a rival's hypothesis. Cultivate, then, in all your scientific work, the honest philosophic doubt which seeks to overcome itself; be sure that your doubt has its origin in the desire "to learn how to distinguish truth from falsehood."

Both popular and scientific thought agree that the universe is not merely an aggregate of separate things but a system. This view is purely philosophic and is reached only by going behind appearance and entering the domain of reason. The law of gravitation, for instance, is an expression of the interaction between all things. The earth's motion is the resultant of the action of every particle of matter in creation; astronomers have calculated ten or twelve different motions for the earth, depending chiefly on its varying distances from the sun and its relations to the moon. But, under the gravitation hypothesis, we must think of this planet as undergoing an infinite number of variations of movement. The most distant stars must attract in proportion to their masses and

in inverse proportion to the squares of their distances ; if true at all, the law of gravitation applies to the smallest particles of matter, and there cannot be the slightest variation in the most distant nebulæ without every planet and sun adapting themselves to the altered conditions. You cannot throw a baseball into the air without disturbing the milky way. The mind reels in its endeavor to grasp such a tremendous hypothesis.

Suppose we limit our view to that of the human body, we find the same idea of a system. You admit at once that every organ of your body is more or less closely related to every other. You know from your study of pathology how disease at one point sets up disturbance in many distant organs; such changes you readily understand because you see them with your eyes, but you cannot stop at that point. If each individual is a system, a unity, every organ exists only as a part of a whole. Not the minutest imaginable change can take place in any organ without every part of that system altering in order to adapt itself to the changed conditions, and however far improved microscopes and technique can carry us toward the detection of these changes, thought must ever carry us beyond in order to meet the logical demand implied in the idea of a system.

Man himself exists only as a part in a system, and in no other way can we study him. Any man is what he is because he is a son or a brother ; the member of a family, of a church, or of a certain political party. He will vary according as he is an inhabitant of the city, the mountains or the plains of a certain country. And his country is what it is because the land and water are distributed in certain ways, the results of certain geologic changes which carry us back to the friendly cover of the nebular hypothesis where we seek rest from mere weariness of thought. There can be no complete nor correct study of man except in his relations to everything else.

> "'Tis the sublime of man.
> Our noon-tide majesty, to know ourselves
> Parts and proportions of one wondrous whole."

Thus, when we logically follow out the idea of a system, we see that any one thing in the universe is what it is only because every other thing is what it is. Completely to know any one thing necessitates knowing the entire universe. The field of science must be divided because reality can be conquered only piecemeal, but consider the close dependence of one science upon another.

What can physiology do without chemistry and physics? How inextricable is history interwoven with geography. The great characteristic of the philosophic worker is that, however small his field, he constantly keeps before him the idea of the whole. However faithfully a man may work with his microscope or his reagents, if he works without the philosophic spirit he is in great danger of forming incorrect hypotheses because he never sees his work in its larger aspect. Under such conditions he is at best only a useful artisan; he officiates as a hod-carrier to the true scientific builder.

It is not the field of work which makes a man narrow; it is the spirit with which he enters it. It is fatally easy to allow our minds to shrink to the limits of our own little activities and become blighted with the curse of specialism. Of course we all mean to be broad, but the cultivation of the philosophic spirit which views everything as a part in a system is the only safeguard against narrowness. Whoso works in this spirit is a philosopher, no matter what his field of work may be and from that spirit come the great advances.

You all know how the doctrine of evolution has conquered the scientific world and becomes a working hypothesis of inestimable value. Many people think that this doctrine came from Darwin, but that is a mistake. The idea originated in Greek and Roman philosophy; its great promulgator in this century is Mr. Spencer. Such phrases as "survival of the fittest" and "adaptation to environment" are Spencerian not Darwinian. The argument from the variation of plants and animals under domestication, the argument from geographical distribution and the arguments from embryology had all been used by Mr. Spencer before Darwin's book appeared.

Darwin's contribution was the Theory of Natural Selection. He was a most painstaking collector of facts, but there were numerous other men who possessed facts enough. Darwin was animated by the philosophic spirit about which we have just spoken. The larger view gave him the meaning of this vast array of facts so that not only did he formulate the Theory of natural selection, but he saw the place where that theory fitted into the larger hypothesis of evolution. There is no more brilliant example of the philosophic naturalist than Charles Darwin.

From this rapid glance at some of the relations between philosophy and science you may have received the impression that, after all, philosophy owes more to science than science to philosophy.

What, then, did Prof. Caird mean by calling philosophy the parent of the sciences? That expression is not a mere figure of speech: it defines the real relationship between the two. By an uncontrolable reflex action man's soul responds to the stimulus of the universe about him, and he is driven into questioning and investigating. The philosophic spirit is the expression of this reaction in every elevated, healthy and enquiring mind. Were it not present, science would be wanting in permanent motive force. The theoretic interest of science lies in the attempt to solve the world riddle, and each department of science furnishes but a few data for the answer. It is not uncommon for some shallow thinker to ask in scornful tones, "What is the use of all your philosophic and scientific theorising?" And if no material benefit can be demonstrated upon the horizon the philosopher is put down as a dreamer.

About one hundred years ago there came up for discussion the subject of the "spontaneous generation" of life. The subject was not new at that time, but the debate became quite animated and, about the middle of this century, attracted the attention of a prominent French chemist. I presume that many persons of "common sense" deplored the amount of time wasted upon a matter which seemed of so little practical importance and that Pasteur had no conception of what the result would be of his interest in the question. Well, you all know how the science of bacteriology developed from that discussion on infusoria and what the benefits for humanity have been. Sir Joseph Lister (Lord Lister) gives to Pasteur the credit for the only principle which could have conducted him to his antiseptic system. I suppose Benjamin Franklin gave reasons very unsatisfactory to his townspeople why he should amuse himself with kite-flying during a thunderstorm, but the impulse which moved him has resulted in the power-house at Niagara Falls.

If the great scientists had waited to get sight of some material benefits before yielding to the philosophic spirit, our heritage from them would have been small. Men do not take up science as they stake out a mining claim, with the idea of striking it rich. In this school most of you will be called upon to do laboratory work, of whose practical worth no one can assure you in advance, but bear in mind that if the philosophic spirit does not promise you a fortune she does offer you a new world, though you may never appreciate how much that world can produce. Therefore, I say, however much philosophy receives from science, her gifts are but the tokens from a loving child.

Not for one moment should we fail to rejoice in the great and purely practical results which have flowed from scientific research. The extraordinary industrial developments and the lavish favors to humanity at large will be bright flowers in the wreath which science will lay upon the bier of this expiring nineteenth century. But the practical applications of science represent territory already conquered, the real battle line is far beyond on the borders of the unknown and the men who form the Grand Army of Science have their backs to the spoils and their faces to the enemy.

Perhaps in this landscape of scientific fact which we set out to view, its full beauty is not seen with the first hasty glance. Perhaps behind it all lies something which constitutes its chief grandeur. Take this printed page before me. You may subject it to rigid scientific scrutiny, you may analyse the paper, you may study the process of its manufacture, you may work out the mechanism of the typewriter and learn the entire history of printing. All this is very interesting and a perfectly proper field for investigation, but I hope there is something more. I hope there is some idea behind it all, and yet, if so, how do you get the idea ? I part with nothing, I simply make certain signs and those signs become the occasion of your constructing within yourself and from yourself an idea which, I trust, resembles mine. All that we know about anything is the idea which we form of it. What if the features in our landscape have their true reality in the idea behind them and that what we take for the solid objects are, after all, but the shadows ? It would be a ghastly mistake to study the scientific phenomena and miss the idea. On the other hand, is it not a noble conception that whenever scientific experience leads to the underlying ideal truth the scientist has grasped a thought of the Infinite's ?

> "For all experience is an arch where through
> Gleams that untraveled world whose margins fade
> Forever and forever when I move."

Are you afraid that a world of ideas may not be real enough for you ? Ask the missionary to Africa what his real and solid obstacles are ; he will tell you how he has crossed burning sands, braved deadly climates and fought fierce men and beasts, only to be brought to a standstill by an impassable wall of ideas in the minds of a savage people. Look into your own lives and tell me if your heaven and your hell does not lie in your ideas ? Is there no reality in the noble friendship which does not crumble with the

passing of the years and which withstands "the slings and arrows of outrageous fortune"? No, the ideal world is but too real, too unyielding. How often would we like to alter it!

But, after all, no one can tell you what you will see when you survey the landscape to which I invited you. The ideas aroused manifest the nature of the gazer; in them lies the difference between the farmer and the poet. The philosophic spirit conducts you to the highest peak and if she does not tell you what to see, she does show you where to look; she warns you not to become sense-bound through scientific work, but to use the mind's eye that you may see the truth which lies behind the senses.

"The truth which draws
Through all things upwards; that a two-fold world
Must go to a perfect Cosmos. Natural things
And spiritual—who separates these two
In art, in morals, or the social drift,
Tears up the bond of nature and brings death,
Paints futile pictures, writes unreal verse,
Leads vulgar days, deals ignorantly with men,
Is wrong, in short, at all points."

452 Franklin Street.

EXPERT TESTIMONY.[1]

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THE complexity of our civilisation has resulted in a minute division of labor and of necessity of special departments of knowledge. As a natural consequence, it has been found that in our courts questions continually arose which required the opinion of one specially skilled or trained in a particular branch of industry or science. And it has become customary to call upon men to give information to the court and jury which will lead to the interpretation of sworn facts from lay testimony. This is necessary and reasonable. It is an expedient to which all or any of us would resort, rather than rely upon our own judgment. For instance, if we were inclined to assist some one by giving him money for a diamond we would probably take the stone to an expert, or perhaps to two, for the purpose of having his expert opinion on the definite fact. Here is a crystal; the layman says it is a diamond. The

1. Read before Buffalo Medical Club, October, 1897.

testimony here asked for is expert. So is the testimony of the person skilled in the detection of counterfeit money, and so through the list of skilled arts.

Most important, however, is the expert medical witness. To him are submitted facts, from which he is asked for an opinion in a great variety of cases. Prominent are questions of legitimacy, divorce and rape ; questions of insanity, as affecting testamentary capacity and as a defense for crime ; questions concerning various obscure injuries ; questions which arise in life insurance cases—all of these questions of vital importance to the community are submitted to the medical profession for an expert opinion on the facts presented. Civilised society believes these questions cannot possibly be settled without our aid.

The honor paid to the physician is a great one when he is asked for an opinion on facts which involve life and property and justice. It is a curious fact that the method of obtaining this testimony has been so unsatisfactory as to render the professional expert appear more often in the psychic partisan rôle of professional advocate instead of a scientific judge.

Of late years there has been a growing distrust of all experts and a feeling against the admission of their testimony. To better show how authors view the subject I quote. Wharton on evidence, section 454, says :

When expert testimony was first introduced it was regarded with great respect. An expert was viewed as the representative of a science of which he was a professor, giving impartially his conclusions. Two conditions have combined to produce a material change in this relation.

1. In matters psychological, there is no hypothesis so monstrous that an expert cannot be found to swear to it on the stand and to defend it with vehemence.

2. Then the retaining of experts by a fee proportioned to the importance of their testimony is now as customary as is the retaining of lawyers.

Hence it is that, apart from the partisan character of their opinions, their utterances, now that they have as a class become the retained agents of the parties, have lost all judicial authority and are entitled only to the weight which sound and consistent criticism will award to the testimony itself. Lord Kenyon used the following language :

"Skilled witnesses come with such a bias on their minds to support the cause in which they are embarked that hardly any weight should be given to their evidence.

But that is an English opinion of English experts; you may think we stand better over here. Let me disabuse you by quoting Judge Davis of the Supreme Court of Maine in the Neil case:

> If there is any kind of testimony that is not only of no value, but even worse than that, it is, in my judgment, that of medical experts. They may be able to state the diagnosis of a case more learnedly, but upon the questions whether it had at a given time reached a stage that the subject of it was incapable of making a contract or irresponsible for his acts, the opinions of his neighbors of men of good common sense would be worth more than that of all the experts in the country.

Stephen, in his criminal law, p. 209, says: "I object to the proposition of referring scientific questions to them (experts)."

In this way has the medical profession of England and America dishonored the trust put upon them. Our judges say our opinions are bought and sold like any other commodity, and after it is given it is worth nothing.

What has brought about this discredit?

Is it that we are less fair-minded and judicial, or is it that we are less honest than are the experts of France and Germany? For in those two countries we find no such distrust.

A study of this question as we know it in Erie county may be interesting. A murder has been committed and the criminal has been apprehended. He cannot prove an alibi nor self-defense. The public know that the defense will be insanity and they know that physicians will be found who will swear they are experts in insanity and that the criminal is insane, and that other physicians will be employed by the district attorney who will swear that they are experts and that the man is sane and responsible. The system that makes this possible is not of the making of the physician. We can plead not guilty to the cause of this farce—we are the natural product of the system. In the first place, what qualifications are required by the court before the testimony of a given man is received as an expert in a given case? Absolutely none. I have seen men qualify as experts who testified that they had graduated from some medical college a few years ago and had practised their profession ever since. It was not necessary for the witness to prove to the satisfaction of the court that he had more than ordinary knowledge of a special branch of medicine, that he had special claim to special knowledge which would entitle him to be believed rather than any other physician. On the contrary, everything with an M. D. attached passes as an expert, and is referred to by

the eulogistic attorney, who would not employ him as a physician, as an eminent and distinguished member of his profession. I have seen the same physician an expert in questions of surgery and insanity, eminent in both. I have been in cases during trial and suddenly the attorney would say, "I want another expert." A messenger goes to the telephone, calls up an eminent gentleman, and tells him he is wanted as an expert in a case. The eminent gentleman comes into court, asks the lawyer what the case is and, strange to say, his opinion was just what the lawyer wanted. I do not say the expert was not honest, but that it was not surprising that his testimony was valueless. While there is nothing to prevent a man from rating himself an expert—so long as no qualification is required by the court—so long we will find men who will swear to anything.

What can we ourselves do individually to remedy this evil and restore the testimony of physicians to something of its former dignity ?

It seems to me that the lawyer must be made to understand that when he approaches the doctor with a case, that he comes first to present the facts to him and then get his opinion and pay him for it. If that opinion is one that he can use, then employ him as a witness. If it is an opinion that he cannot use because it is adverse to him, let him, if the physician is a man whose services are required, be retained for advice and be paid without going on the stand.

This is not Utopian—this is practical, and just as profitable to the doctor in the long run as the other policy of taking whichever side is first presented. If we go on the witness stand as the result of careful study of a case, and have come to conclusions as a result of such study, our opinions are matured and we shall be fully able to maintain them.

In an experience with a large number of damage suits against railroads, I have adopted the following policy : I examine the case, report upon the facts as I find them and state what my opinion is. If the case comes to trial I usually find the physician on the other side is willing to admit my facts, but differs in his conclusions. I usually find in studying the cases that we are both somewhat influenced by our training and reading, and that it is impossible to agree. Does that prove that we are not honest or that the circumstances of our employment makes it impossible to see the case correctly ? I believe that in the vast majority of cases we

honestly differ, and that each of us is a healthy check upon the other.

In some cases I have come across most palpable frauds and have found most unscrupulous physicians who appeared as experts. They had to swear and swear hard, for their fee depended upon success. In many cases where expert testimony is given I have observed a certain shrewdness of physicians. They attempt to give evasive answers—to give half a truth, not the whole truth. They show they are partisans by their testimony. Their appearance on the stand is exceedingly entertaining, but it is not convincing. Some of the best exhibitions of mental gymnastics by experts have been proved to have very little weight with juries. The appearance of candor and fairness, a willingness to state or at least admit scientific truths which do not strengthen the side which is paying you, gives the witness greater authority with the jury when he gives his final opinion.

Let one consider the way in which an opinion is obtained. Each side prepares a wonderful question—the hypothetical question. Each attorney includes all the facts favorable to his side and suppresses all the unfavorable facts he dares. These questions vary in length from a document that takes ten minutes to read to one that will take two to three hours. The witness who has already made up his mind is asked for his opinion. The question is usually so adroitly framed that but one answer is possible, and to one question he answers sane, and to the question of the opposing side he must answer insane.

This was true in the Ingalls will case. In this case a question that took ninety minutes to read was propounded by the contestants. In this question certain sworn statements were grouped in such a manner that the answer insane was inevitable. The defendants of the will assumed another set of facts, which, if true, compelled me to state that the man was sane. My opinion as to whether Ingalls was sane or insane was never asked and never given. A physician could come at an opinion much more nearly correct if he were to have all the testimony placed before him given him to study and then asked for his opinion on the case.

Let him state in answer to a question that he has studied all the testimony and arrived at such and such an opinion based on such and such facts. Let him state the theory of insanity which is consistent with this judgment and let his opinion be tested in accordance with his theory by a rigid cross-examination. Such a

method would do away with the hypothetical question which never truly states a case and would give the witness an opportunity to state his real opinion. By this method I do not believe that the evil of the present method would be removed. We would still have partisans—but the partisans would not be able to crawl behind the hypothetical question and say "I never said he was insane ; I said the hypothetical question described an insane person. If I had been asked what I really thought I should have answered the other way."

One thing more. It has frequently been charged that experts will always swear as they are expected or employed to swear. This is a great exaggeration. It is my experience that in civil cases for damages that men's consciences are a trifle more elastic than common, and that they take wonderfully gloomy views of the consequences of a slight injury ; but in criminal cases I believe that it is rare to find physicians willing to testify for the people, unless they are firmly convinced of the soundness of their opinion. It is a very mean man who will take the stand and swear a poor devil is sane and therefore guilty of murder if he is doubtful about it. I think the mental attitude of the expert for the defense is a trifle different. He feels that he is helping the under dog and doing nobody any harm if he is mistaken. As a general rule I think the experts for the people are more apt to be right than those for the defense.

I have two notable exceptions to this statement in mind at present—Guiteau and Prendergast. I believe both these men were insane, yet I think the experts believed that their execution was politically necessary. Whether they were right or wrong in this it is not my province to discuss.

That experts have acted as judges of testimony and have refused to appear for the people has occurred twice in my own experience, once in this county, when Ellen Hughes was tried for infanticide. The defense was insanity. The experts summoned by the district attorney believed she was insane and were not called to the stand.

In Wayne county, in the case of the People against Childs, the murderer of Nichols, Dr. MacDonald, Dr. Ford and myself were employed by the district attorney to look after the interest of the people. The testimony of lay witnesses was so weak in laying the foundation for insanity that we were sure of a victory for the people. We were not allowed to examine the prisoner till the

third day, when we were all convinced that we were on the wrong side. We so reported to the district attorney and the judge. The trial was stopped then and there, and the prisoner was sent to Matteawan. Did that raise the standard of expert testimony in that county? Not a bit of it. Sold out, was what was whispered.

From my experience in the past seven years in criminal trials I want to emphasise that I think the cases are rare in which experts for the prosecution are not thoroughly in sympathy with their side. I think that it often occurs that witnesses will honestly differ, and I see no more reason for doubting their honesty of opinion on a given set of facts than for doubting the honesty of judges of the Court of Appeals. They do not always agree.

Finally, of what value is the testimony? According to the judges it is of very little; according to many jurymen it is of little. Nevertheless, it is necessary, and it is for us to give it or withhold it, so that when we do appear it shall be a guarantee that that side has our honest endorsement.

527 Delaware Avenue.

GONORRHEA IN WOMEN.

By J. Henry Dowd, M. D., Buffalo, N. Y.

Of the more serious afflictions that are ravaging the ranks of womanhood today gonorrhea must be placed first. It must be placed before phthisis, for while life lasts the latter is bearable, but the sufferings of one whose pelvic organs are invaded by the dread germ gonococcus cannot be described better than to say she lives a life of torture every hour, from the beginning to the close of each year. After life is considered not worth living and years have been spent in painful meditation, possibly over past wrongs, possibly not knowing the cause of their sufferings, the gynecologist is sought, who at once suggests an operation for the removal of tube or ovary, or perchance to clear the pelvis of everything but the bladder, rectum and vagina. Is she now well? No. You have changed her pain, but from physical to mental; she is neither male nor female. These thoughts constantly confront her and the mental suffering at times is great.

It is not to the last division, those that are infected by husbands who perchance years before had a gonorrhea and thought

1. Read before the section on gynecology, Buffalo Academy of Medicine, October 26, 1897.

themselves well, but infected their wives with a low grade of inflammation; it is to the class where the disease is acquired acutely to which I especially desire to call attention. I will make a broad statement, but I wish to go on record as affirming that *not one woman in thirty knows when she has gonorrhea.* Lest you consider this an irrational statement let me explain.

Nature is just, just in the sense that she prevents the male from sexual indulgence while the disease is acute and when the pus is flowing from him in a stream loaded with germs; but it is, on the other hand, when chordee and discharge have subsided that he attempts what to him is pleasure but to the receiver untold suffering and worse than death. At this stage there is nothing left at the entrance, but the débris in the urethra is carried up even into the cervix uteri; thus in not 5 per cent. of cases is the urethra or vulva involved. There is no pain on urination, no swollen lips and no difficulty in walking. Unless those parts of the anatomy are involved, the woman has no symptoms that invite attention of the medical man to a possible infection, for where a woman comes complaining simply of an excess of leucorrheal discharge, as she will term it, unless a careful microscopical examination is made she will leave your office not knowing she has a specific inflammation, which, unless heroic treatment is used, rapidly extends upward, involving the tubes, ovaries and peritoneum.

Before giving the symptoms it may not be amiss to classify the different forms, that is, the different localities involved, each of which must be studied separately, treated differently and will give different symptoms. By all means the most common is cervicitis or endocervicitis. With this form we may well add endometritis, as unless the case is seen early and vigorous measures used the inflammation by continuity will extend rapidly from the cervix upward. Metritis, salpingitis, oöphoritis and peritonitis are very likely to follow.

Vagina.—When this is the seat of inflammation the urethra generally partakes therein, although it is by no means uncommon to find one or the other separately involved. The glands, as a general thing, take up the germs and it is from these, containing pus after the visible inflammation has been cured, that one becomes infected and another does not, although both may have been with the same woman the same night. I shall now speak of the symptomatology as urethritis, vulvitis, cervicitis or endocervicitis. The trained eye can in a large percentage of cases diagnosticate gonorrheal

inflammation; not that it differs in color materially from other inflammations, but there is an angry look which when once photographed on the mind it is hard to forget. Do not let me create the impression that the microscope is not necessary; on the contrary it is an absolute necessity. I might say that in all discharges from the vagina, except possibly in virgins, two or three slides should be made and examined carefully with a 1-12 oil immersion lens.

Vulvitis.—Whether the urethra be involved or not there is always pain on urination. It is especially marked if it is involved. The mucous membrane is intensely red and swollen, and walking is painful, due to friction of the labiæ. If the discharge is not absorbed, but comes in contact with the skin, it will become excoriated and at times pruritus is very distressing. Separation or movement of the lips causes much pain. The small periurethral glands and those of Bartholini can at times be seen swollen and are very noticeable. Should the urethra be involved, with the finger in the vagina, stroke forward and pus will be seen to exude from the meatus. The pus in this form will be more profuse than any form, except general vaginitis. If of a golden color mixed with green this should especially call attention to the fact that you are probably dealing with something other than a simple inflammation.

Vaginitis.—Where the vagina is entirely involved the discharge is very profuse and of the color described in vulvitis. A temperature ranging from 100 to 104° F. is often present. A feeling of fulness with heat will be complained of, but unless the vulva is involved there is only a frequency of urination with possibly a small amount of pain as the bladder closes to expel the last few drops; there is no pain or burning, as when the urine must flow over an inflamed membrane. The inflammation, as a rule, does not involve the whole membrane, but occurs in patches the size of a nickel, intensely swollen and angry-looking. The introduction of a speculum is very painful, and even the nozzle of a syringe causes much suffering. When it is necessary to use a speculum the Ferguson is the one advisable. In withdrawing this instrument the whole mucous tract can be seen much more plainly than with the bivalve.

Cervicitis, Endocervicitis.—This is the form with which many a poor woman suffers, and not knowing her condition or that anything is radically wrong, goes on from month to month with the few inconveniences I shall mention until an attack of pelvic peritonitis or severe ovarian pain drives her to the physician, who after weeks of

local treatment with no result, turns her over to the gynecologist. I think I am safe in saying that 90 per cent. of women who receive the gonococcus receive it at the cervix. It is in this condition they know not what they have until some careful investigator finds the germ. With a little inquiry the urine of the husband or lover will be found to contain any quantity of shreds and drops of pus, which, if examined, will be found to contain these specific cocci. The symptoms are so trivial these women do not early seek medical aid. Of course the doctor cannot be blamed if the patient does not consult him, but he is responsible if she does come and he does not use all possible means for a correct diagnosis, including the microscope.

Who, then, is at fault? Surely the cause of this specific inflammation can be traced to some one, and I most positively state it is the physician or surgeon who treated the man, discharging him as cured simply because the discharge had stopped. The discharge will be increased, increased from the normal, which all women have more or less, but not to any extent as in the cases where vulvitis or vaginitis exists. Blood may mingle therein, in fact blood cells may be found with the microscope in nearly every case.

Unless complications have set in, no pain will manifest itself. The speculum will almost decide the case, for always there will be found a cervix deeply eroded, bright red in color and having the most angry look imaginable. The vault will be filled with pus and exuding from the cervix a plug of bright yellow tinged with green. If the inflammation has involved the uterine cavity the discharge will be more profuse and possibly a feeling of fulness will be experienced by the patient.

It is not my intention to go into a description of the conditions after the inflammation has become chronic or passed out of the uterine cavity, but a few words touching this point may be of value. Generally a history of menses, extending a day or two or possibly three or four over the usual time, and that the flow is stronger and more profuse. Dysmenorrhea, which formerly was not present, is now much in evidence, and unless the trouble has extended beyond the uterus it commences with the first flow of blood. Sterility is a common complication. The discharge will be more marked after the menstrual flow has ceased.

When inflammation has passed into the tubes, ovaries and peritoneum, general symptoms will manifest themselves and to such a degree that medical aid will be sought at once. To stop the

advance of gonorrheal inflammation the treatment must be vigorous, even heroic in the extreme. The fact must be borne in mind that a road leads directly from the labia majora to the peritoneal cavity. When this road once becomes inhabited with specific germs their course seems to be rapidly upward, thence to the right or left, possibly some passing both ways, distributing pioneers en route until this cavity is reached, where, blocked from further progress, they expend their force by causing inflammation of every thing in reach.

How different the female from the male sex as to treatment and complications. In the latter there is no direct opening into the peritoneum, but strong germicides cannot be used on account of the smallness of the tube, as their use would cause atresia or stricture. On the other hand, in the female, strong caustics can be used freely with no fear of resulting cicatrices. Of internal treatment very little can be said. Hygienic measures should receive careful attention. In all varieties it is necessary to keep the bowels open freely. A calomel purge, followed by a saline, should be given early and repeated every few days if thought necessary. When the vulva or urethra is involved the urine should be made bland ; should pruritus develop, a lotion of carbolic acid, 3 to 5 per cent., will usually relieve it. The diet at first should be light and easily assimilable. Later, when the inflammation has taken on a chronic form, good nutritious food is called for. A word of warning which is probably more important than all others, is the care of the hands and napkins used by such patients. They must be told of the danger should pus reach the eye, and also of the danger others undergo should they use their towels. The napkins should either be destroyed, soaked in bichloride solution, 1 to 1000, or boiled for half an hour. The hands should be thoroughly washed after each handling of the affected parts. Baths every day will be found very beneficial, and I would advise not a sitz but a general wetting of the whole body. I think it safe to say that bichloride, silver and the curette will be all that is necessary in the way of local measures, but they must be used with vigor.

With vulvitis or vaginitis, rest in bed for a few days is necessary. Where vulvitis exists alone, a thorough cleansing with bichloride, 1-4000, after which the whole mucous surface should be brushed over with a solution of silver 20 per cent., the lips separated with cotton, outside of which should be placed a pad of absorbent cotton, so that all discharge can be picked up at once. Douches

of this strength of bichloride must be used three times a day and on every third day silver reapplied if necessary, the strength of which can be increased to 50 per cent. should occasion require it. When the urethra becomes involved, owing to its shortness, the inflammation rapidly reaches the bladder. After urination pass an endoscopic tube as far as the sphincter vesicæ, but not into the bladder, and with a swab touch the mucous membrane throughout with a 10 per cent. solution of silver. By the aid of the electric light the inflammation can be watched and every third or fourth day silver used as high as 20 per cent.

Vaginitis.—In this condition instrumentation and local remedies, other than those used with the douche, will have to be postponed for a few days, because where the trouble is general the swelling and tenderness is great. This will especially be found if the speculum is used. The patient should be sent to bed and all hygienic and dietetic measures carried out as heretofore mentioned. Every third hour a bichloride douche, 1-5000, should be used, about half a gallon of the fluid being employed at each sitting. After a continuation of this for about three days it will be found that a speculum can be introduced without much pain, a Ferguson being the one advisable. As the mucous membrane comes into view at the end of the tube all spots of inflammation can be seen and touched ; in fact, the whole vaginal membrane can be swabbed with a 20 to 50 per cent. solution of silver. Douches should be continued morning and evening, and on the third day silver reapplied, as with the endoscopic tube in the urethra the inflammation can be watched and all areas of redness thoroughly treated until rendered normal.

Even in this day of vast research, when by the aid of the X-ray a bullet can be located in the abdominal cavity, diagnosis of the kidney involved in Bright's disease made out, or any other inflammation thereof, and we can also see the lesion in the urethra, yet we are unable to say where an inflammation ends, *i. e.*, to what area it has extended along the membrane ; therefore as a routine measure, though one I have never seen advised, where a gonorrheal inflammation has involved any portion of the female anatomy above the hymen, the uterus and cervix should be curetted.

The great and important question now arises when can curettement be done without danger of these angry cocci being taken up, floated through the system and giving rise to inflammatory conditions in the joints, endo- or pericardium and other remote tissues

On the other hand, to be of any value in preventing extension into the tubes, ovaries and other tissues, it must be done before the inflammation reaches these structures. In the male, where we can study the discharge, the extending inflammation and the appearance of the cocci, we find, I believe it is not a disputed fact, that after a certain time they enter a state of lethargy. Inflammation, then, does not extend as rapidly as heretofore unless aroused by an additional irritant or stimulant. The discharge also becomes thicker but less in quantity. Now is the time to clear them out together with all involved membrane. About the twelfth to fifteenth day from the time of infection, the condition described above will be found. All antiseptic precautions must be carefully carried out. With the woman in the dorsal position the small dilators should be used first and then one of the heavier instruments, the cervix being stretched at least three-fourths to one inch. This is absolutely necessary in order to squeeze out the contents of the cervical glands which are usually the seat or fortress of the germs we are striving to remove. The uterus should now be thoroughly curetted, together with the cervix, care being taken to clean out the fundus and openings into the Fallopian tubes. After thorough cleansing with bichloride, 1-5000, the whole cavity and that of the cervix should be thoroughly touched with a solution of silver 40 to 50 per cent. and packed, not very tightly, with iodoform gauze, which can be left in for forty-eight hours. Usually about the fourth day separation of the slough commences, during which time hot douches should be employed at least three times a day. If a careful microscopical examination is made, the discharge will be found to consist of pus cells, mucus and a few cocci, but not gonococci. A course of local treatment by iodine and ichthyol or the galvanic current, followed by local applications, will in the course of a few weeks greatly lessen, if not almost stop, this muco-pus discharge. During this treatment the bowels should move daily and tonics of iron, strychine and hydrastis be given. Sometimes it will be found necessary to repeat the curetting, applying the silver as before. The complications of gonorrhea in the female should be treated the same as though occurring in the male.

206 Franklin Street.

Clinical Report.

THREE CASES OF CEREBRAL MENINGITIS.

By FRANCIS E. FRONCZAK, A. M., M. D.,

Visiting physician and surgeon to the Felician Sisters Institute; and to the Polish Orphan Asylum at Cheektowaga, N. Y.

CASE I.—Early one morning I was asked to attend a dying child. Arriving at the bedside I found a six-year-old boy in an unconscious condition with rapid Cheyne-Stokes respiration, a pulse of 180 and temperature at 109°. I could not believe my thermometer at first, but as another physician, who was called by some other member of the family, arrived at this time, I asked him to take the temperature, and again 109° was registered. The case being now left in my hands I was at first at a loss what to do. The reduction of temperature, however, presented itself as most pressing, so I called for cold water and towels, applied a cold pack about the head and ordered an alcohol rub. The history of the case was short. Some time before the child had scarlatina, but got well and was in fairly good health until the day before I was called. At six in the evening he began to vomit and had a convulsion, then he complained of headache, and the lamplight pained his eyes. Later he became unconscious and had two or three involuntary evacuations. At 10 P. M. the boy felt better and was deeply asleep, being disturbed but once or twice during the night by a sharp pain in the head. At six in the morning he got up complaining of hunger. After partaking of some bread and milk he began to vomit again, this being followed by a convulsion and unconsciousness, in which condition I found him. His head was retracted, pupils contracted, fingers clinched over the thumb, and the legs drawn up. The child never regained consciousness, dying about noon-time the same day.

CASE II.—A week later I was called to see a woman who but a few hours before was in fairly good condition, and now was supposed to be dying. The patient, S., 60 years of age, was lying in a bed in a comatose condition, head drawn back, and pupils irregularly contracted. Respiration of the Cheyne-Stokes type, pulse irregular and rapid, temperature 97° F. I learned from the patient's daughter that she complained lately of loss of appetite, chills and fever, constipation, lateral headaches, especially of the left side and of earache. On examination I found purulent material in the left ear. The woman could not be aroused from her unconsciousness, stimulants brought no response, and shortly after my arrival she died.

CASE III.—Boy, age twelve, head bandaged, restless, now and then uttering a shrill cry. History of the case was that he fell from a freight car and hurt his head. Arriving home his mother washed the wound

with cold water, and buying five cents' worth of carbolated vaseline. applied the same on a dirty piece of linen and sent the boy to play. A few hours later he complained of headache, weakness and vomited. After being given some whisky he soon rallied, but would not eat his supper, saying he could not eat. About fifteen hours after the accident I was called, as he became restless and complained of headache. I cleaned the wound as best I could under the circumstances I had to contend with, the mother objecting to the removal of the surgically clean bandage (?) she applied to the wound earlier in the day. Three hours later I was summoned again, and found the boy in a semi-comatose condition, breathiug rapidly, about sixty a minute; pulse was nearly 200; temperature, 103½° F.; pupils irregularly contracted and every touch seemed to pain him terribly. He had one or two convulsive spasms during my presence and died within a few minutes.

The question will now arise as to the nature of these three cases, similar to each other in some features, and again unlike in other characteristics. No doubt that they were cases of cerebral meningitis. The first most probably secondary to the scarlet fever from which the child suffered a short time before; the second case was a result of otitis media, from which the woman previously suffered. The third case of meningitis was traumatic in its origin Each could have been prevented had it been properly and early attended. Each of these a gruesome and costly lesson that a trifling matter, to all appearances, may bring serious results. The temperature varying, as it did from 109° F. in the first case to 97° F. in the second, being another proof how greatly it may differ in the same disease; in one a hyperpyrexia, in the other case almost two degrees below normal.

508 Fillmore Avenue, Buffalo.

Society Proceedings.

THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

Reported by C. A. VANDER BEEK, Secretary.

THE Thirtieth Annual Meeting was held at the Ellicott Club, Buffalo, N. Y., Tuesday, October 19, 1897. The President, Dr. Edward B. Angell, of Rochester, called the meeting to order at 10.25 o'clock.

Upon motion of Dr. Gerin the reading of the minutes of the previous meeting was dispensed with.

The PRESIDENT appointed the following committees:

Credentials.—Drs. E. L. Mooney, Onondaga; B. C. Loveland, Ontario; John Gerin, Cayuga.

Business.—Drs. Lucien Howe, Erie; John O. Roe, Monroe; J. P. Creveling, Cayuga.

Reception.—Drs. W. W. Potter, C. G. Stockton, Wm. C. Krauss, Edw. Clark, Franklin C. Gram, Erie.

Publication.—Drs. Wm. C. Krauss, Erie; C. A. Van der Beek, S. L. Elsner, Monroe.

The report of the treasurer showed:

Receipts	$288.77
Disbursements	124.90
Balance on hand	$163.87

Upon motion of Dr. GERIN the report was accepted.

On request of the President, the Vice-president was called upon to preside.

Vice-president Dr. KRAUSS took the chair and said: Before listening to the address of the President I will say that the Association is the guest of the Medical Society of the County of Erie, and also of the Ellicott Club. Everything that we have is yours. Take all you can and be sure and come back again three years from now with a good remembrance of the time you have had here today.

In calling for the address of the President, I don't believe Dr. ANGELL needs any introduction, as he is well known to us through his many years of service as secretary of this Association, and I am sure we will listen to his address with a great deal of pleasure, profit and entertainment. (Applause.)

The President, Dr. EDWARD B. ANGELL, of Rochester, delivered the annual address, entitled, The hygiene of the mind.

Upon motion of Dr. CREVELING a vote of thanks was tendered the President for his most excellent address.

The PRESIDENT then resumed the chair.

The following members and delegates registered:

Cayuga.

Cheesman, Wm. S.	Foreman, E. S.	Lewis, LeRoy
Creveling, J. P.	Gerin, Jno.	Sefton, F.

Chautauqua.

Evarts, R. M.

Cortland.

Higgins, E. W.

Erie.

Andrews, C. H.
Bayliss, A. W.
Benedict, A. L.
Burnham, N. L.
Clark, Edward
Clemesha, J. C.
Cohen, B.
Colton, A. J.
Congdon, C. E.
Crego, F. S.
Dowd, J. Henry
Dunham, S. A.
Frederick, C. C.
Goltra, J. N.
Gram, F. C.
Grosvenor, J. W.
Hoyer, F. F.
Hubbell, A. A.
Krauss, W. C.
Mann, M. D.
McGuire, F. W.
Millener, F. H.
Mulford, H. J.
Munter, H.
Porter, J. S.
Reynolds, C. J.
Rochester, DeLancy
Rogers, B. F.
Smith, E. A.
Stockton, C. G.
Thoma, Fridolin
Ullman, Julius
Walsh, J. J.
Wende, G. W.

Genesee.

Andrews, L. B.
Stone, F. L.
Whittier, E.

Livingston.

Perry, E. C.

Monroe.

Brown, W. M.
Cook, R. G.
Culkin, J. R.
Davis, J. C.
Dolley, Sarah R. A.
Earl, E. H.
Elsner, S. L.
Ely, W. S.
Finnessy, Jas. H.
Flick, J. W.
Graham, H. C. W.
Henckell, A. W.
Herriman, W. J.
Howe, Wm. J.
Howell, H. B.
Howk, L. W.
Huber, C. A.
Jones, F. A.
Jones, O. E.
La Moure, C. T.
Lane, G. A.
Leary, M. E.
Maloney, F. W.
McCauley, J. W.
Mooney, Thos. T.
Mulligan, W. T.
Puffer, S. W.
Roe, Jno. O.
Rose, L. W.
Sawers, F. H.
Slaight, Mary J.
Vander Beek, C. A.
Weigel, L. A.
Wolff, W. D.

Niagara.

Falkner, W. J.

Onondaga.

Clark, G. E.
Cone, Allen.
Cullings, Helen M.
Elsner, H. L.
Hawley, H. B.
Jacobson, N.
Kellogg, W. C.
Mooney, E. L.
Marlow, F. W.
Snow, S. F.
Stephenson, F. H.
Vadebonceœur, A. F.

Ontario.

Eiseline, S. A.
Hallenbeck, O. J.
Jackson, C. O.
Loveland, B. C.
Lichty, Jno. A.
Lichty, Cora L.
Mead, A. M.
Thayer, C. C.

Orleans.

Caverly, M. L.
Dugan, Jno.
Gould, F. B.
Storer, F. B.

Oswego.

Crispell, E. W.

Steuben.

Kelly, J. G.

Wayne.

Brownell, M. Alice
Young, A. A.

Wyoming.

Goodwin, P. S.
King, W. E.
Straight, A. B.

Upon motion the following visitors were invited to be guests of the society, and to take part in the discussions:

VISITORS.

E. Whittier, Genesee county; Edward Clark, Fridolin Thoma, Franklin C. Gram, N. L. Burnham, Jas. S. Porter, John J. Walsh, J. N. Goltra, Chas. E. Congdon, C. H. Andrews, M. D. Mann, Erie; S. W. Puffer, Mr. John Dennis, J. R. Culkin, Mary J. Slaight, Monroe county; W. J. Falkner, Niagara county.

Dr. Howe, chairman of the business committee, announced that papers would be limited to ten minutes and discussions to five minutes, at the end of eight minutes a warning would be given, and at the end of ten minutes final notice by a tap of the bell.

Papers were then read as follows: A case of unusual defective development in an infant—consisting of compound complicated hare-lip, and bilateral maxillary fissure, together with attachment of the intermaxillary bone to the end of the nose. Correction of this deformity by plastic operations. By John O. Roe, M. D., Rochester.

Report of a case with exhibition of the patient. By Charles G. Stockton, M. D., Buffalo.

Report of special committee on remedial legislation in regard to expert testimony. By Frederick Sefton, M. D., chairman.

Upon motion of Dr. H. L. Elsner all discussion and action upon this report was postponed until the papers of Dr. Henckell and Mr. Tracy C. Becker had been read.

Surgical treatment of tubercular peritonitis. By J. P. Creveling, M. D., Auburn.

Discussed by Drs. Nathan Jacobson, Syracuse; W. S. Cheesman, Auburn; John A. Lichty, Clifton Springs; M. D. Mann, Buffalo; H. L. Elsner, Syracuse, and in conclusion by Dr. Creveling.

The value of expert testimony in medico-legal cases. From the medical standpoint, by A. W. Henckell, M. D., Rochester. From the legal standpoint, by Tracy C. Becker, Esq., Buffalo.

The use of the fluorometer in Röntgen-ray work. By Mr. John Dennis, Rochester.

The society then adjourned for luncheon, to re-convene at 2 o'clock.

The President on behalf of the Medical Society of the County of Erie then invited all the members of the Association, the delegates and registered visitors to a luncheon, which was served in the private dining rooms of the Club.

The President called the Society to order at 2.30 p. m.

Dr. Gerin announced the names of the following gentlemen who had complied with the constitution and by-laws and moved their election to permanent membership: Drs. F. W. Higgins, Cortland county; F. B. Storer, M. L. Caverly, F. B. Gould, Orleans county; J. W. McCauley, T. T. Mooney, F. A. Jones, L. W. Howk, R. G. Cook, Jas. H. Finnessy, H. C. W. Graham, C. T. LaMoure, C. A. Huber, Monroe county; A. F. Vadeboncœur, Allen Cone, Onondaga county; J. A. Lichty, C. C. Thayer, Ontario county; Frederick Sefton, Cayuga county; J. Henry Dowd, Erie county; A. B. Straight, Wyoming county. They were so elected.

Dr. Gerin: For a great number of years Auburn has been sending a large delegation to the meetings of this society, and has accepted of the very kind treatment of the different cities, and we are anxious now, sir, to do our part in carrying on the work of the Association. I therefore offer the following amendment to Article II. of the constitution, and move its adoption.

Article II. of the constitution shall hereafter read as follows:

The Association shall meet annually on the third Tuesday of October, the meetings to be held alternately in Rochester, Buffalo, Syracuse and Auburn.

The motion was seconded by Dr. Creveling, of Cayuga. After discussion by the President and Drs. Gerin and Creveling the amendment was adopted.

A doubt having risen as to whether or not notice of this amendment was given at the meeting of 1896, the chair ruled—upon the affirmative assertion of Dr. Gerin—that, inasmuch as the stenographic notes of said meeting were incomplete he would hold that notice had been given in accordance with Article XVII.

The election of officers for the ensuing year now being in order, the chair appointed as tellers: Drs. Young, of Wayne, and Maloney, of Monroe, and announced that a formal ballot would be taken.

Officers elected for the ensuing year are: President, Dr. Wm. C. Krauss, of Buffalo; first vice-president, Dr. E. L. Mooney, of Syracuse; second vice-president, Dr. E. S. Foreman, of Auburn. The secretary and treasurer continue in office another year.

Dr. Gerin then read the following letter, which was afterward ordered printed in the Transactions:

343 Sherbourne Street,
Toronto, October 18, 1897.

The President *New York Central Medical Association.*

My Dear Mr. President—The eighth annual meeting of The American Electro-Therapeutic Association will be held in Buffalo, on the second Tuesday in September, 1898, and two following days and we should be very much pleased to receive a delegate from your association.

We also extend a most cordial invitation to your members to attend our sessions.

Our secretary, Dr. John Gerin, of Auburn, N. Y., will present this.

Fraternally yours,

CHARLES R. DICKSON,
President A. E. T. A.

Upon motion, the President was designated the delegate to represent this association at the meeting of the American Electro-Therapeutic Association, which meets in Buffalo next year.

The President then announced that a motion would be entertained authorising the secretary to issue credentials to delegates from this society to the meeting of the American Medical Association. The notice was not responded to.

While the tellers were preparing the ballots for president, the paper entitled, A rare case of sarcoma cutis, with exhibition of

patient, by Grover W. Wende, M. D., Buffalo, was called for and read.

The President here called for the report of the committee on remedial legislation, of which Dr. Sefton is chairman.

Dr. Sefton, chairman of said committee, reported as follows: After further consideration of the matter in the committee and with different members of this society, there has been drafted a resolution that will be introduced for your action, viz.:

Resolved, That this report (referring to the report of the special committee) be received and the committee be continued and be empowered to confer with committees of the different state medical societies upon remedial legislation with regard to expert medical testimony, and if possible to prepare a bill to be presented at the coming session of the legislature.

Dr. Howe moved the adoption of the resolution, which was seconded by Dr. Gerin and carried.

Upon motion of Dr. Jacobson it was ordered that a reprint of the various matters pertaining to medical expert testimony, which have been presented before this society today, be published in pamphlet form for distribution as the committee (on remedial legislation in regard to expert testimony) may desire.

After full discussion regarding the publication of the transactions of the society, and the offer by Dr. Krauss, on behalf of the Buffalo Medical Journal, to furnish 200 copies for $50, the society voted an appropriation of said sum for the purposes named.

The reading of papers being next in order, Dr. Howe, of the business committee, reports as follows:

I think it is hardly necessary to apologise to those from Buffalo who have prepared papers, that their papers will be placed last in the list, or after having heard at least from those out of town.

The next to be called for is the one entitled, The Adirondacks in winter for tubercular patients, by Sargent F. Snow, M. D., Syracuse.

Dr. Stephenson, the second vice-president, then took the chair, after which the paper was discussed by Drs. Mooney, of Syracuse; Rochester, of Buffalo; Ely, of Rochester; Elsner, of Syracuse; Loveland, of Clifton Springs, and in conclusion by Dr. Snow.

The treatment of congenital dislocation of the hip by the Lorenz Method, radiograph illustrations, by L. A. Weigel, M. D., Rochester.

Discussed by Dr. Mynter, of Buffalo, and in conclusion by Dr. Weigel.

A case of appendicitis with unusual sequelæ, by NATHAN JACOBSON, M. D., Syracuse.

Clinical reports with specimens. By HENRY L. ELSNER, M.D., Syracuse.

Discussed by Drs. Rochester and Benedict, of Buffalo, and in conclusion by Dr. Elsner.

Report of a case of Jacksonian epilepsy. By F. H. STEPHENSON, M. D., Syracuse.

Some popular errors in the treatment of nervous prostration. By B. C. LOVELAND, M. D., Clifton Springs.

Discussed by Drs. Mann, of Buffalo; Angell and Weigel, of Rochester.

Carcinoma of the testicle. By A. A. YOUNG, M. D., Newark.

The uses of the stomach tube in the practice of general medicine. By JOHN A. LICHTY, M. D., Clifton Springs.

Discussed by Dr. Benedict, of Buffalo, and then by Dr. Lichty.

Strictnre of the urethra. By J. HENRY DOWD, M. D., Buffalo.

Upon motion, the following papers were read by title and ordered published in the transactions: Cause and prevention of sudden death after fifty, by Sydney A. Dunham, M. D., Buffalo; Late additions to our knowledge of certain parasitic affections of the skin, by Frank J. Thornbury, M. D., Buffalo; A plea for local anesthesia in removal of large abdominal tumors in the aged, with the report of a case, by Henry T. Williams, M. D., Rochester; Removal of the uterus in pelvic disease, by C. C. Frederick, M. D., Buffalo; Hysteria and brain tumors, by Wm. C. Krauss, M. D., Buffalo; The ocular headache as an American disease, by Lucien Howe, M. D., Buffalo; The relation of HCL. secretion to indicanuria, by Allen Jones, M. D., Buffalo; Auto-intoxication, by Wm. D. Wolff, M. D., Rochester; Certain cardiac affections in relation to life insurance, by John H. Pryor, M. D., Buffalo; Overdressing of children, by W. M. Brown, M. D., Rochester; A report of a case of puerperal diphtheria, involving the vagina and endometrium, by S. L. Elsner, M. D., Rochester.

The President: Is there any further business before the association?

Dr. YOUNG then offered this motion, which was carried: "In view of the most elegant entertainment we have had here today it

is very proper that we offer a vote of thanks to our Buffalo brethren. I move that a vote of thanks be tendered to the Medical Society of the County of Erie for the royal way in which they have entertained the association today."

The PRESIDENT: In closing the meeting for the day I personally wish to thank all those who have participated in the meeting for the thorough work that has been accomplished, for the willingness that has been shown by those who have not been able to complete their papers within the prescribed time to give way to others, but above all, to the local committee of arrangements whereby we have had a most successful meeting brought to a termination. I now declare the thirtieth annual meeting adjourned to meet at Auburn the third Tuesday of October, 1898.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

KINDERGARTEN WORK AND EYESIGHT.

DR. CASEY A. WOOD, of Chicago, has (*New York Med. Jour., July 17, 1897,*) written an article especially for kindergartners, in which he has endeavored to show that the beginnings of damaged eyesight are laid in the early years of school life; the prevention of the evil concerns chiefly, therefore, the kindergartner and the teachers in the lower forms, for the trouble is often past remedy when the pupil enters the high grades. He submits the following suggestions:

1. Every kindergarten and every school should be provided with certain well-known and simple tests of vision, and no child of any age should receive instruction who has not good eyesight.

2. It should be a part of the teacher's duty in the public schools, and in some private institutions the teacher is the only guardian (in any sense) that the child possess, to note any defects of vision and have them corrected if possible.

3. No child with uncorrected or incorrigible defects should be allowed to use his eyes for any kind of close work before he is eight or nine years of age, lest worse things befall.

4. In the kindergartens the children should be taught only those things that demand the minimum employment of the accommodation for near work. Fröbel's "gifts" are sufficiently numerous and varied to enable both teacher and children to pass happy and profitable hours without damaging the precious inheritance of vision, and without inflicting defective eyes upon generations yet unborn.

5. Some kinds of instruction are in their nature unsuited for infant's eyes. I admire the work and teachings of such well-known authorities as Kate Douglas Wiggin and Nora Archibald Smith, and agree with them in many of their contentions. For example, I feel, with them, that it is questionable whether "children naturally incline to large movements in drawing," and that "they instinctively make pretty figures." I would certainly not allow them to engage in any kind of drawing, because the tendency always is, as with the grown-up folk, to indulge more and more in elaborate designs.

6. If one turns to the plates in the back of Josephine Jarvis's translation of Frederick Fröbel's *Spiel und die Spielgegenstände der Kinder*, or to the elaborate designs affixed to many similar text-books on kindergarten study, (Mrs. Rowland Hill's *Brush Work for the Kindergarten*, for example,) it will not be difficult to eliminate those occupations and studies that are palpably inimical to the eyesight of the child.

7. Speaking broadly, Fröbel's first four "gifts," and the uses to which they are ordinarily put in the kindergarten and the occupations to which they may give rise, are mostly devoid of harm so far as the eyes are concerned. They also suggest many *Mutter* and *Koselieder*, the use of which in kindergarten work is so much to be commended and leaves so little to be criticised that I sometimes ask myself whether with balls and blocks and the accompaniment of song and play kindergarten children might not be made to undergo a healthier development than that which the more complex and elaborate occupations subserve.

8. Above all do I deprecate certain occupations commonly recommended by and pictured in most of the latest kindergarten text-books. These are perforating cards, embossing, fine sewing, drawing in all its forms and phases, most kinds of paper interlacing, intricate paper cutting and folding, peas work, clay modeling, chain making (except when the links are very large), bead stringing, etc. These practices, however little indulged in, are

almost certain to damage the eyesight of kindergarten children.

9. Among the less hurtful occupations—some of them harmless—are games not involving near work to any extent, slat interlacing (with wide slats of well-contrasted colors), sand work (especially if indulged in as German children use it out of doors), gardening, that Fröbel loved so well, building with large blocks, and the occasional use of simple apparatus, like Putnam's "busy work tiles."

AN EXPLANATION OF THE ACTION OF IRIDECTOMY IN GLAUCOMA.

In the *Progrès Médical* for May 29th there is a remarkable article, by Dr. Abadie, on the nature of glaucoma and on the way in which iridectomy proves beneficial in that disease. The author begins with the remark that permanent pathological changes must give rise to continuous and not to transitory symptoms; hence a glaucoma, acute or subacute, that manifests itself by crises cannot be due to a permanent change in the sclero-corneal region, or to effacement of the irido-corneal angle, or to structural alteration of Fontana's space. Transitory disturbances, he adds, are necessarily due to the agency of the nervous system. The theory of the nervous origin of glaucoma has been maintained before, but always with a preponderating influence ascribed to the fifth pair. Recent discoveries, however, show that the trigeminal is purely a sensory nerve, charged exclusively with conveying peripheral impressions to the centers. The trophic influence over the eye attributed to it must, therefore, be ascribed to the fibers of the sympathetic which accompany it and take part in the formation of the ciliary nerves.

On the strength of these facts, Dr. Abadie undertakes to show that glaucoma depends on irritation of the vaso-dilator nerves of the eye, a temporary irritation in the form marked by crises and a lasting one in the chronic variety. The increased tension results from exaggerated repletion of the blood-vessels and perhaps, also, from a supersecretion of intraocular fluids dependent thereon.

The author refers to François Franck's statement that the vaso-dilator nerves of the eye have the same medullary origin and follow the same course as the dilator nerves of the pupil, and he adds that, therefore, it is not astonishing that the pupil should always be dilated in glaucoma, since irritation of the one set of nerves is accompanied by irritation of the other set. But the most striking proof that glaucoma is really occasioned by dilatation of the blood-

vessels of the eye, he says, is furnished by the action of mydriatics and meiotics. Atropine, for example, always aggravates the glaucomatous crises, even if it does not occasion them, while eserine mitigates them.

In cases of acute or subacute glaucoma, iridectomy acts surely, and it is of service in all forms in which the functional troubles are intermittent. The following are M. Abadie's ideas of the way in which it acts: Under normal conditions the nervous currents which regulate the reciprocal relations of vascular dilation and constriction pass through the nervous plexus, situated in the median zone of the iris, in which terminate a certain number of ciliary filaments. When the vaso-dilator current is in the ascendant it reaches this plexus without interruption, and dilation of the vessels of the eye is the consequence. But, if the plexus has been cut, the excessive action of the dilator current ceases and order is restored. In iridectomy, then, it is not the mere excision of a bit of the iris that is effective, but the excision of a portion of the nervous plexus that it contains.

M. Abadie goes on to say that it is easy to demonstrate the truth of this explanation. If, he says, in a case of acute glaucoma, simply the pupillary sphincter or the ciliary periphery is subjected to the excision, the median zone containing the circular plexus being left intact, the operation is of no use. If, however, the excision is so done as to involve only the median zone, it is as effective as complete excision. It is of little consequence whether the piece of iris removed is wide or narrow, provided it includes the whole breadth of the iris; indeed, simple section without any excision would suffice.—Editorial *New York Medical Journal*, July 10, 1897.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

ANALYSIS OF THE URINE IN NEPHRITIS.

BIERWIRTH, M. D., (*Brooklyn Medical Journal*, November, 1897,) says diseases of the kidney are diagnosticated by the analysis of the urine and the specimen should invariably be taken from the entire output for twenty-four hours. No opinion should be based upon a specimen passed at any time of the day or night.

The entire production for twenty-four hours should be obtained to make sure of accurate measurement and the patient instructed as to the mode of collection. The urine should be passed into one or two clean bottles, corked and kept cool. The beginning of fermentation renders it unfit for analysis. To prevent fermentation, a drachm of chloral in solution should be put into the bottle, which should be well shaken after each addition. The chloral will prevent the development of bacteria and the urine will keep at all temperatures without fermentation. Alkaline fermentation destroys the microscopical elements of importance.

We cannot differentiate the various forms of nephritis by analysis of the urine, so that it is only practical to consider acute and chronic congestion and acute and chronic nephritis, and even then with the greatest care mistakes are made because we find the same urinary characteristics in the different forms of chronic inflammation of the kidney.

To make an examination of urine, note quantity, reaction, color, specific gravity, phosphates and chlorids, albumin, urea and sediment.

Quantity.—The average physiological quantity for twenty-four hours is about fifty ounces. The amount of urine is markedly diminished in all forms of acute nephritis, in acute exacerbations of chronic nephritis and in congestion of the kidney. There is less diminution in chronic diffuse nephritis. The urine is increased in waxy degeneration and slow forms of chronic nephritis.

Reaction.—In health the twenty-four-hour output is acid. It is also acid in the majority of kidney inflammations. Pus in the urine makes it faintly acid, neutral or alkaline when voided and causes it to become rapidly alkaline on standing.

Color.—In all acute cases the blood is usually smoky, brown or chocolate color, due to the blood in the presence of acid. If the urine is alkaline the blood imparts a red color. In chronic nephritis the urine is usually straw color and clear, and this is especially so in amyloid degeneration. When the urine becomes scanty it is a dark amber color.

Specific gravity.—In acute inflammation the specific gravity is high, 1030 or over, due to concentration and the presence of blood. In chronic nephritis the specific gravity is below the normal and does not increase with diminution of the amount of the urine. In the cirrhotic kidney the specific gravity is usually between 1010 to 1012. A persistent low specific gravity points to chronic nephritis,

unless there be high blood pressure from lesion of the circulatory apparatus, which will increase the specific gravity.

Phosphates and *Chlorids* may be considered together. They give no significance, except as a sequence of indigestion. They are relatively increased in acute nephritis, due to the concentration of the urine. They are diminished in all chronic cases. In chronic nephritis, occasionally, the specific gravity is increased by the phosphates and chlorids and is not due to the increase of urea. This should be borne in mind in making a rough estimate of the amount of urea from the specific gravity.

Albumin.—The test for albumin is most important for diagnosis. Numerous tests have been proposed and much has been written on this subject. Blood-serum transudes from the capillaries into the tubules as a result of changes in the capillary walls; changes in the composition of blood or blood pressure. These different causes should be borne in mind, as they have a clinical and therapeutic significance.

Albumin in the urine does not always signify kidney lesion; it is found in anemia, chlorosis and eclampsia, as well as in other cases in which there is no evidence of nephritis.

Dr. Delafield recognises four varieties of albuminuria without nephritis:

Paroxysmal cyclic albuminuria.—It occurs in young males in poor health. There is a regular rise and fall in the amount of albumin. It appears in the morning and disappears at night. This regular cycle follows changing the hours of rest, of meals and of exercise. The cause is unknown; it may be due to the blood or the renal capillaries. The differentiation between cyclic albuminuria and nephritis is very difficult.

Diatetic Albuminuria.—This occurs in both children and adults and follows the ingestion of certain kinds of food. The quantity of albumin is small and few or no casts. This form is serious only if persistent.

Albuminuria after Exertion.—This form is due to violent and prolonged exertion, probably causing renal congestion. The albumin disappears after a few hours' or days' rest.

Single Persistent Albuminuria.—The albumin is not abundant, but appears nearly every day. A few hyalin casts are found. Such cases, in time, are apt to produce chronic nephritis, endocarditis or endo-arteritis.

Tests for Albumin.—The tests for albumin are numerous and

many of them objectionable, because they precipitate both the serum albumin and the nucleo-albumin (mucin).

The contact method is objectionable, because the zone of opacity is faint and heat often disturbs it, making the result doubtful. Dr. Bierwirth employs two tests for albumin, the heat and nitric acid and the ferro-cyanid of potassium. The urine should be perfectly clear, and if not so it should be filtered through a double wet filter. It should be acid in reaction. Boil the urine in a test-tube and add 15 to 20 drops of strong nitric acid. Instant turbidity will show an appreciable quantity of albumin; if there is only a trace, turbidity will gradually appear after five or ten minutes.

Cork the tube and set it aside for six to twelve hours and usually a precipitate forms. This precipitate will be, (1) acid urates; (2) uric acid; (3) nitrate of urea; (4) albumin. The first three are redissolved by heat. Boil the second time and turbidity means albumin. This test avoids the mucin reaction, as strong acid dissolves the mucin.

The ferro-cyanid test is described in detail in Purdy's Practical Analysis; it avoids the mucin reaction, is reliable and delicate.

Albumin is found in abundance in acute congestion, waxy degeneration and in chronic congestion, with high blood pressure.

In chronic nephritis and so-called cirrhotic kidney the amount of albumin is small and absent at times.

The next most important ingredient is urea. In chronic nephritis the urine should be frequently examined, for the treatment depends upon the amount of urea eliminated. It is the associates of urea that are so pernicious in uremia.

The Doremus apparatus for estimating the amount of urea is simple and quickly used, therefore preferable. The daily amount of urea is diminished in all kidney diseases.

The tolerance of urea is variable. Urinary sediment is the most important for diagnosis; it contains all the pathological elements resulting from renal disease.

GENERAL PATHOLOGY OF NEPHRITIS.

J. M. Van Cott (*Brooklyn Med. Jour.*, November, 1897,) says the kidney structure is well adapted to the study of the principles of pathology, because all the component elements of tissue structure are found therein; it is so highly endowed with function and the nature of its function is so apparent that diseased processes readily indicate structural changes.

All tissues are composed of two elements: the first is called the parenchyma and is composed of cells, which manifest an active function; the other is intercellular substance, or stroma, and has a passive function. If the normal ratio in point of quantity of parenchyma and stroma be disturbed, the function is also disturbed. In the make-up of a complex organ these elements vary in form and function in its different portions, but its total activity will equal the sum of its various special functions during its physiological activity. In addition to parenchyma and stroma all organs are endowed with vessels, lymphatics and nerves, arranged in a systematic way and often in characteristic order of the particular organs. Organic lesions may be similar in different organs and their clinical manifestations be widely different.

Pathological changes are found in either the parenchyma, stroma or both, of organs and the primary seat may be in the vascular, nervous or lymphatic structures. The differences in the pathology of organs is due to the variety, form and function of their component elements. The parenchyma is most abundant in the cortex, and here the uriniferous tubules are lined with several varieties of epithelium, indicating a complex function. Strictly speaking the parenchyma is located in the uriniferous tubules and it is estimated that there are several miles of these tubes in the kidney. The stroma is most abundant in the medulla, which holds straight tubes lined with epithelium whose function is obscure. There are two parenchymatous functions, osmotic and secretory. The vascular apparatus presents a terminal circulation in character; the intertubular arteries run up into the cortex without collateral circulation. The straight vessels run between the ducts of Bellini without oscultation. The capillary loops in Bowman's capsule, fed by the vasa afferentia and drained by the vasa efferentia, promote osmoses of water, which dissolves the salts excreted by the epithelia of the convoluted tubules, forming urine. The lymphatics closely envelop the uriniferous tubules, thus exposing the organ to infection by pathogenic germs. The ultimate relation of the renal nerves is not known, but they are intimately associated with the individual tubules, indicating that the trophic fibers enter the parenchymatous elements.

Renal lesions are parenchymatous, stromatous or diffuse and are caused by changes in the quality and quantity of the blood and lymph; by trophic changes in the ultimate parenchymatous elements and primary cardio-vascular lesions. Nephritis may be

acute or chronic and involve one or all of the elementary structures. Acute nephritis is parenchymatous or diffuse.

In acute nephritis there is rapid epithelial degeneration, hemorrhage into the tubules, epithelial desquamation and albuminous exudation. Long-continued toxemias induce parenchymatous changes and hyperplasia of stroma. Chronic hyperemia results in chronic hyperplasia of connective tissue and ultimate destruction of the parenchyma. Whether parenchymatous atrophy is a result of chronic interstitial hyperplasia, or whether it occurs *pari passu* with the change in the stroma, is a mooted question. The result will be atrophy with formation of cysts in the cortex and contraction of the uriniferous tufts and obliteration of the Malphigian tuft. The epithelium atrophies and undergoes fatty degeneration, with pigmentation from long-standing hemorrhage.

Changes in the kidney simulate changes in the liver and may be regarded as chronic parenchymatous degeneration, hypertrophic or atrophic cirrhosis and disturbances due to vascular lesions. Acute parenchymatous nephritis is due to acute renal hyperemia; acute diffused nephritis results from septic infection. Chronic renal lesions are resultant from various causes.

The primary vascular lesions are: (1) White infarct; (2) hemorrhagic infarct; (3) septic thrombosis and embolism; (4) endarteritis obliterans.

White infarct is due to oligemia, red infarct to hyperemia, venous stasis and hemorrhage, and both result in coagulation, necrosis, diffuse atrophy and cicatrisation.

Microbic infection causes lymphatic lesions, since the lymph channels are the common carriers of germs, and the particular kind of germ decides the ultimate pathological lesion. Certain cardiac lesions produce chronic renal hyperemia and characteristic renal changes and characteristic changes in the urine.

Diseases of the kidneys are no more complicated than those of the other organs; any cause that will produce lesion of the kidneys is calculated to produce disease in the other organs, whether acute or chronic. Lesions of the glomerular epithelium result in albuminuria; lesions of the tubular epithelium result in reduction of elimination of urea and other salts.

HYDROZONE IN DISORDERS OF THE GENITO-URINARY TRACT.

Dr. John Aulde (*Medical Times and Register*,) states that about eight years ago he was impressed with the value of peroxide of

hydrogen in a protracted case of gonorrhea. The disease had persisted for three months despite treatment, there being a constant discharge and in addition an orchitis was present, the left testicle being about as large as a baseball. Treatment: injections of equal parts of peroxide of hydrogen and moderately warm water at intervals of four hours, the injections being followed by a solution of arsenite of copper, one milligram (one 65th grain) to the drachm, diluted with an equal quantity of hot water.

In a week the discharge from the urethra entirely ceased and pain and chordee disappeared.

Aulde advises the same treatment for nonspecific urethritis and gleet, but as hydrozone is much stronger (2 times) than the peroxide and perfectly harmless he gives it the preference.

In vaginitis and vaginismus this treatment is of especial value. The treatment heretofore recommended by physicians, consisting of hot vaginal douches, either with or without some alkali, as sodium bicarbonate, followed by the injection of a small quantity of peroxide of hydrogen (medicinal) in warm or cold water, is superseded by the single application of a hot solution of hydrozone, one part in eight; the patient should use a fountain syringe hung upon the wall six feet from the floor. The injection should be repeated twice in twenty-four hours.

In uterine diseases, where the solution must be brought into contact with the endometrium, the following treatment is pursued: The patient is placed in the dorsal position, with the hips well elevated; an ordinary dilator is employed to distend the cervix, so as to admit the nozzle of the syringe and permit the free egress of the injected fluid; (a suitable return flow tube can be used to better advantage—the Fritsche's douche is the best that can be used). The injection is then made, a liberal amount of the hot medicated solution being used.

There is need of caution in chronic cases that the effervescence which attends the destruction of the unhealthy tissue does not force some of the débris into the Fallopian tubes. This is best avoided by using a large quantity of the solution and afterward directing the patient to assume the upright position. The pressure thus brought to bear upon the uterus will cause the complete discharge of all débris.

A preliminary vaginal douche should always be taken, using the medicated solution, as otherwise harm might ensue by the entrance into the uterus of the vaginal secretions. The author warns against

the use of the vaginal douche if the cervix be patulous, as there is an almost certain danger of the infected vaginal débris being forced into the uterine cavity. To avoid this the vagina should be cleansed by the local use of the medicated solution through the speculum.

The author believes hydrozone to be the best remedy for cystitis occurring either in the male or female. The bladder should be washed out with the solution (one to eight), a small quantity being used at first in chronic cases, owing to the painful muscular contractions following the withdrawal of the solution. The amount can be gradually increased. (A double current hard rubber catheter should always be used for that purpose). In gonorrhea, gleet and cystitis, the local treatment is oftentimes aided by the internal administration of hourly doses of calcium sulphide, one-tenth of a grain.

PHYSIOLOGICAL CHEMISTRY.

Reported by JOHN A. MILLER, Ph D.,
Professor of chemistry, Niagara University.

OXYGEN TENSION OF ARTERIAL BLOOD.

JOHN S. HALDANE and J. Lorrain Smith (*J. Physiol.*, 1896; *J. Chem. Soc.*, 1897). It was proved that the oxygen tension of human arterial blood is 26.2 per cent. of an atmosphere, or 200 mm. of mercury; as this is higher than the tension of oxygen in alveolar air, diffusion alone will not explain the passage of oxygen from the alveolar air to the blood.

MUSCULAR POWER AND GASEOUS METABOLISM.

Louis Schnyder (*Zeits. Biol.*, 1896; *J. Chem. Soc.*, 1897.) The increased discharge of carbon dioxide that occurs during work is lessened by practice. The amount of decomposition of tissue depends on the extent of the exertion rather than of the work done. In normal individuals the involuntary muscles are already in a state "training," and in weakened convalescents these work with abnormal exertion even during so-called rest.

OCCURRENCE OF INOSITE IN THE THYROID GLAND.

R. Tambach (*J. Pharm.*, 1896; *J. Chem. Soc.*, 1897). This substance appears to occur in larger quantity, from 0.5 to 0.8 per cent., in the thyroid gland than in any other part of the body.

CHEMISTRY OF THE THYROID GLAND.

ROBERT HUTCHISON (*J. Physiol.*, 1896 ; *J. Chem. Soc.*, 1897). The thyroid contains two proteids, a nucleo-albumin and the colloid matter ; the former is present in small amount and is probably derived from the epithelium. The colloid is contained in the acini. It contains a small amount of phosphorus, a considerable proportion of iodine ; it yields no reducing substance on treatment with mineral acids and no nuclein bases, and is, therefore, neither a mucin nor a nucleo-proteid. On gastric digestion it is readily split into a proteid and a nonproteid part ; both of these, but especially the latter, contain iodine. The nonproteid part contains all the phosphorus of the original substance. The ordinary extractives are fairly abundant, but the colloid is the active physiological constituent of the gland ; both parts of it are active, but the nonproteid part is the more active of the two.

THE SIGNIFICANCE OF CHLORIDES IN ANEMIA.

WACLAW VON MORACZEWSKI (*Virchow's Archiv.*, 1896 ; *J. Chem. Soc.*, 1897). During anemia there is a diminution in the excretion of chlorides in the urine ; the excretion increases as the patient gets better. Calcium phosphate behaves like the chlorides. The alkali phosphates and uric acid are increased in amount in the urine in the anemic period ; this increase lessening with convalescence. An addition of calcium phosphate and sodium chloride to iron salts increases their blood-forming action.

PHLORIDZIN DIABETES.

F. H. PAVY (*Proc. Physiol. Soc.*, 1896 ; *J. Chem. Soc.*, 1897). The statement has been made that in phloridzin diabetes there is no glycohemia. The present communication shows that if fallacies in the collection of blood, in the use of antiseptics and in the method employed for analysis of the blood be avoided, there is a distinct rise in the percentage of sugar in blood as a result of giving the drug.

THE PROTEIDS OF LEUCEMIC URINE.

R. KOLISCH and R. BURIAN (*Zeits. Klin. Med.*, 29 ; *J. Chem Soc.*, 1897). Albumosuria is not a constant feature in leucemia ; when present it probably originates from decomposition of leucocytes,

the increase in alloxuric substances in the urine supporting this view.

CHANGES OF THE FAT OF CHYLE IN THE BLOOD.

WILHELM COHNSTEIN and Hugo Michaelis (*Pflüger's Archiv.*, 1896 ; *J. Chem. Soc.*, 1897). The blood has the property of causing the disappearance of the fat of the chyle, introduced in the natural way or by artificial injection. This depends on the presence of oxygen and is associated with the corpuscles of the blood. The red corpuscles contain a substance which has this *lipolytic* function; the fat is changed into a substance insoluble in ether ; this substance is not gaseous, but solid ; water and carbon dioxide were not found in experiments *in vitro*. The change the fat undergoes is probably saponification ; but further work is in hand on the question.

EFFECT OF A MEAL ON THE NITROGEN OF THE URINE.

OTTO VERAGUTT (*J. Physiol.*, 1897 ; *J. Chem. Soc.*, 1897). After a meal rich in proteids, the output of nitrogen in the urine shows three rises, one immediately, the second two to four hours and the third six to seven hours later. If the food is poor in proteid, the three rises are still seen, but are not so well defined. The first rise is the most constant.

MULTIPLE INTESTINAL CONCRETIONS IN MAN.

C. T. MÖRNER (*Zeits. Physiol. Chem.*, 1897 ; *J. Chem. Soc.* 1897). The concretions removed from the intestine of a man gave the following results on analysis :

Magnesium ammonium phosphate	82.23	per cent.
Calcium phosphate	5.24	" "
Magnesium phosphate	1.64	" "
Calcium carbonate	1.61	" "
Calcium soap	0.75	" "
Neutral fat	0.20	" "
Insoluble organic substance	1.90	" "
Water, traces of soluble organic substances, etc	6.43	" "

CHLORIDES AND PHOSPHATES OF THE BLOOD IN DISEASE.

W. VON MORACZEWSKI (*Virchow's Archiv.*, 1896 ; *J. Chem. Soc.*, 1896). The blood was investigated in a number of diseased condi-

tions of diverse kinds. In pneumonia the chlorides are diminished; they rise after the crisis. The phosphates are abundant; this usual in acute diseases, the urine showing a correspondence. In nephritis there is an increase in the chlorides and a decrease in the phosphates. In lead poisoning, if lead is passing into the urine, the blood is rich in chlorides. The urine is poor in chlorides, rich in phosphates, the opposite to the blood; the same is true for anemia.

PHYSIOLOGICAL ACTION OF CHOLINE, NEURINE AND ALLIED SUBSTANCES.

F. W. Mott and H. D. Halliburton (*Proc. Physiol. Soc.*, 1896; *J. Chem. Soc.*, 1897). When injected into the circulation, small doses of choline hydrochloride cause a marked temporary fall of blood pressure, which is cardiac and not peripheral in origin. It occurs also after section of the vagi. Neurine hydrochloride produces a preliminary fall and a subsequent rise of pressure, respiration being slowed and deepened. This drug is more toxic than choline; respiration ceases before the heart.

The physiological interest of these observations is derived from the fact that the cerebrospinal fluid, in cases of brain disease, where, as in general paralysis of the insane, there is great wasting of the brain substance and disintegration of its cells, produces exactly the same effects as solutions of choline. Normal cerebrospinal fluid is innocuous: the toxicity of the pathological fluid is due to the same nonproteid substance precipitable by phosphotungstic acid. It is probable that this substance choline is derived from the lecithin of the brain. If this is the case, the enfeebled circulation with severe fainting fits and fatty degeneration of the heart, so frequently seen in cases of general paralysis, will be in part accounted for. The blood removed by venesection from patients during the fits contains the same substance.

If gonorrhea in a female involve the vulva, Horwitz recommends that she be kept perfectly quiet; that the parts be washed with a solution of boracic acid or with a 1,4000 solution of bichloride of mercury, then dusted with an antiseptic powder consisting of calomel and bismuth; and a piece of cotton is to be kept between the labia.—*Am. Jour. Surg. and Gynec.*

Selections.

ON THE USES OF ALPHA NAPHTHOL.

DR. J. v. MAXIMOWITSCH (*Deutsche Arch. für klin. Med.*, lvii., 3-4,) points out the advantages of alpha naphthol over betanaphthol. It is three times less toxic and a three times stronger antiseptic.

Dr. v. Maximowitsch gives the following as useful formulæ:

1. To disinfect the intestine, a solution in castor oil is best, because evacuation of intestine and antisepsis go together.

℞	Alpha Naphthol	gr. xlv.
	Chloroform	mv.
	Ol. Menth. Pip.	mii.
	Ol. Ricini, ad	℥iii.

One tablespoonful for a dose.

2. For choleraic diarrhea and true cholera.

℞	Alpha Naphthol	ʒiss.
	Chloroform	ʒss.
	Ol. Menth. Pip.	miv.
	Ol. Ricini, ad	℥iii.

One to four tablespoonfuls daily.

Another method of employing the drug, in some ways preferable, owing to the sharp burning taste of alpha naphthol, is to give it in compressed tabloids.

Small tabloids:

Alpha Naphthol	gr. iv.
Pulv. Rhei.	gr. i.
Ext. Belladonna	gr. $\frac{1}{6}$.
Tinct. Cinnamon.	mii.

For one tabloid. One to two tabloids for a dose; about ten tabloids to be taken a day.

Large tabloids:

Alpha Naphthol	gr. viii.
Pulv. Rhei.	gr. ii.
Ext. Belladonna	gr. $\frac{1}{6}$.
Tinct. Cinnamon.	mii.

For one tabloid. One to two for a dose; six to ten tabloids to be taken a day.

In enteric fever Dr. v. Maximowitsch uses tabloids freshly prepared, according to the following formulæ :

Alpha Naphthol	gr. iv.
Phenacetin	gr. iii.
Pulv. Rhei	gr. i.
Tr. Cinnamon	mii.

For one tabloid. One or two tabloids six times a day.

In severe cases of enteric he uses one of the following powders :

Alpha Naphthol	gr. viii.
Bismuth Salicylate	gr. ii.
Pulv. Rhei	gr. ii.
Ext. Bellad	gr. $\frac{1}{6}$.
Pulv. Cinnamon	gr. iii.

In cachet. One four to six times daily.

Or,	Alpha Naphthol	gr. viii.
	Phenacetin	gr. vi.
	Quin. Brom.	gr. ii.
	Pulv. Rhei	gr. i.

In cachet. One six times daily. —*Treatment.*

Correspondence.

CARCINOMA IN THE NEGRO.

BOSTON, October 25, 1897.

To the Editor : 58 Beacon St.

SIR :—In your valuable journal for October I find on page 174 that Dr. W. F. Westmoreland states in the *American Journal of Surgery and Gynecology* "that Dr. Warren's declaration (in his text-book of Surgical Pathology, 1895) 'that carcinoma does not occur in the negro is wholly incorrect.' He has seen at least a half dozen cases in the last two years." I find that on page 643 of my Surgical Pathology, in speaking of the geographical distribution of cancer, I say : "Negroes are generally supposed in America to be much less afflicted with cancer than the white race." Any facts bearing upon this subject are of great interest and I should be glad to hear a further expression of opinion from Southern surgeons. I have never seen a case of cancer of the breast in the negress and should be glad to be informed in regard to any case. I have, however, had under my care a very malignant form of cancer of the uterus in a full-blooded negress. Respectfully yours,

J. COLLINS WARREN.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXVII. DECEMBER, 1897. No. 5.

THE MAYOR-ELECT.

DR. CONRAD DIEHL was chosen Mayor of Buffalo at the recent election by a majority so considerable as to speak strongly of his personal popularity. Dr. Diehl has been a successful practitioner of medicine in Buffalo for the past thirty years, is well known to the profession and has a large acquaintance amongst the general public. The writer is not of Dr. Diehl's political party nor did he vote for him at the last election; nevertheless, he desires to tender the good-will of the JOURNAL to the incoming Mayor, who will take office January 1, 1898, and to say, that while its pages are denied to politics in its popular sense, yet it takes a keen interest in public affairs involving medical questions, and it will be only too ready to lend any aid in its power to Dr. Diehl in his administration wherein it touches questions of public and private health, applauding him when he acts justly and in accordance with modern scientific thought, offering adverse though friendly criticism if he shall do otherwise, but which latter necessity we do not anticipate.

It has been stated by many persons that a physician is not competent to hold public office except in the line of his profession. We desire to controvert this statement in a most emphatic manner. Doubtless there are physicians, as there are other citizens, unfitted for public place, because ability of this sort is a personal equation, but it is not denied to doctors anymore than it is to other professions or occupations. The fact is, that were a congress of physicians gathered from the four corners of the earth it would be found to possess more learning and ability, more liberalism and general knowledge, more administrative tact and more resources than any

other group of men possible to assemble outside the ranks of medicine. There is no reason why a physician, trained to thought and action, should not make a good legislator, a good mayor, a good governor, or a good president. On the other hand, there is every reason why men of education, activity and training, such as most physicians are, should enter the ranks of politics whenever their fellow-citizens in considerable numbers or large groups invite them to do so. The English parliament is adorned by the names of Playfair and Lister, and the German reichstag by the immortal Virchow, the great liberal leader ; Jules Simon, too, was a life senator of France. But we digress from the main purpose of this article.

In addition to the ordinary duties performed in the executive chair, the mayor of Buffalo is ex-officio president of the board of health and of the board of police. He also appoints two members of the board of public works, besides numerous other officers who will serve the city during his administration. It will thus be observed that the mayor comes in direct touch with all that most immediately influences the health and prosperity of this great city. We place health first because without it there can be no prosperity. We fear business men are often inclined to overlook this important fact, whereas with a physician in the mayor's chair it will be ever foremost and be the governing principle in all his public acts, as it must be the controlling element in his private life. If this principle is overlooked in time of general good health, how quickly in the shadow of an epidemic does every one rush to the doctor for aid, comfort and protection. Let anyone who doubts question the business men of the South, asking them what effect the recent epidemic of yellow fever has had upon their business interests.

The water supply of a city demands the greatest circumspection with a view to its preservation, untainted and free from disease germs. It will be impossible for Dr. Diehl to furnish the city with *free* water, but as mayor it will be his duty to see that the board of public works and the health department, acting together, conduct into every household *pure* water in ample quantities.

Unnecessary noises in great cities are factors that contribute to the causation, prolongation or exaggeration of ill health. This journal has lifted its voice time and time again on this subject since July, 1893, when it began to point out editorially this evil, but so far to very little purpose. The noise nuisance and the smoke nuisance go hand in hand and should be absolutely suppressed in so

far as they are both unnecessary. There are perforce necessary noises as there is some necessary smoke, but we need not differentiate —Dr. Diehl is a diagnostician.

The tenement house question properly comes before the mayor for solution. If the workingmen are to be kept healthful their homes must be kept clean, and frequent inspections must be made by competent persons. Whenever evils are reported they should be promptly corrected at whatever cost. An outlay in this direction is economy.

Clean streets are other important factors in the promotion and preservation of health. Our beautiful asphalted streets and avenues are kept reasonably clean in summer and autumn, but in winter sometimes they become a disgrace to modern civilisation.[1] Snow and ice are allowed to freeze in deep layers and to thaw out into grooves, holes and ruts, making traffic unsafe and almost impossible in places. The street railways throw the snow in heaps at the sides, which adds to the dilemma, for now almost every street of importance is traversed by tramcars. Here is the opportunity for the employment of idle men who are always clamorous for work, and whose employment becomes an important question in economics, since there is no surer way to prevent sickness than to employ the idle. Clean streets must not be limited to the business sections, but even on the outskirts of the city, esspecially in the workingmen's quarters, should receive attention, for it is impossible to secure clean homes without clean streets. A city is no cleaner than its dirtiest quarter.

The enforcement of school ordinances and careful school hygienic regulations becomes part of the mayor's duties, and no man in Buffalo should better understand these problems than Dr. Diehl, since he himself has been a school examiner for many years

The police inspection of saloons and of houses of prostitution will necessarily entail much careful thought on the part of the mayor, because as a member of the board of police he becomes directly responsible for the administration of that important department. Fortunately, in the person of Gen. William S. Bull, Buffalo possesses one of the best superintendents of police she ever had, and in him Mayor Diehl will find a coadjutor of force and decision, who will aid in protecting the health of the young by keeping them aloof from these two places of serious temptation.

1. It may be noted that last winter the main thoroughfares were kept in better condition than usual. Snow was more promptly removed from them.

The city's poor, the almshouse and the county hospital, always appeal to the better sentiments of a generous people and become objects of special interest to the mayor, and if he is also a physician he is all the better prepared to deal generously and honestly with these delicate subjects. We commend them to Dr. Diehl as of the greatest importance.

Finally, let us suggest to the incoming mayor a keynote to his success as a chief magistrate—namely, that he puts only the best men in office that he can secure to begin with, and that he keeps them in place only so long as they continue to remain the best. Fortunately, Mayor Diehl will find a well-organised health department and a splendidly administered police force to aid him in the discharge of his multifarious and irksome duties, and we trust that the end of his administration will witness a higher health-rate in Buffalo, even though now it stands at the head of the list of cities of its class.

TOPICS OF THE MONTH.

The courtesies of journalism are always pleasant to receive as well as to bestow. We take especial pleasure in reproducing the following editorial from the *Medical Record* of November 20, 1897:

WHAT THE "MEDICAL RECORD" DOES.

The Buffalo Medical Journal, in an editorial in its issue of October last, referring to the late Moscow congress, says: "The *Medical Record* has published a full cabled synopsis of the proceedings, which is a marked instance of journalistic enterprise as well as lavish expenditure."

So far as we know this is the only reference which has been made in any American medical journal to what has been the most difficult and expensive attempt on our part to supply our readers with the news of the day, *pari passu* with its occurrence.

Remarkable as is the occasion, it is perhaps not to be wondered at, since any such reference would only go to show the lack of the same enterprise and expenditure on the part of any metropolitan journal so noticing it. We refer to it here simply to impress upon our readers the fact that the *Medical Record* never spares expense in providing material and news which the wide-awake members of the medical profession should have to keep themselves in the front rank of scientific progress. Its corps of regular correspondents all over the world is, unquestionably, we presume, the largest and most complete of any. We think it will hardly be considered egotism for us to say that it is the one journal

which is indispensable to all who desire to be informed promptly of the progress of medical science and of medical news. While we make this claim for the *Medical Record*, we must reiterate what we have repeatedly said in these columns before—that no medical man who can afford it should neglect also to subscribe for and do what he can to support and encourage his local medical journal. With that and the *Medical Record* coming regularly to his table, he could be no better equipped if he subscribed to a dozen other journals, so far as periodical literature pertaining to his profession is concerned.

The vending of spectacles will not be permitted on the streets of Buffalo. Mayor Jewett has invariably declined to grant licenses for such purposes. Moreover, in every license granted by the mayor the following prohibitive clause is added: "No eye-glasses are to be sold under this license." It has been stated in the newspapers that a lawyer proposes to test the matter in the courts, by applying for a writ of mandamus to compel the mayor to issue a license permitting the sale of spectacles. The mayor holds that he has power to refuse such a license, that he has habitually refused them because the sale of spectacles not scientifically tested before purchase might work great injury upon the eyes of people who buy them, and that he will willingly defend a suit to compel him to issue licenses in such cases. The attitude of the mayor is undoubtedly correct and deserves the approbation of all intelligent people.

A Washington dispatch to the *Tribune*, dated November 15, 1897, stated that

> Surgeon-General Sternberg, of the Army; Dr. Horlbeck, of Charleston; Dr. Josiah Hartzell, of Canton, Ohio; Dr. Samuel H. Durgan, of Boston; Dr. A. H. Doty, of New York, and Dr. S. R. Olliphant, of New Orleans, the president of the Louisiana State Board of Health, all members of the American Public Health Association, called at the White House today. They saw the President and urged him to incorporate in his message a recommendation that a commission be appointed to go to Havana to study the subject of yellow fever and the manner in which it is brought to the United States. They declared that good regulations in Havana would do more to prevent yellow fever in the United States than the best quarantine regulations that could be adopted and enforced. The President said he would give their suggestions due consideration.

THE illegal practice of dentistry will not be permitted in the city of New York. The *Tribune* of November 17th said:

Gaetano Amato, the agent of the State Dental Society, yesterday caused the arrest of Claudius Adams, an employe in the Boston Dental Parlors, No. 44 East Fourteenth Street, on the charge of practising dentistry in this county without being licensed or registered, as the dental law requires. Adams, when taken before Magistrate Wentworth, in Jefferson Market Police Court, said that he was not guilty of the charge, on the ground that he did only mechanical work, but his position was not borne out by the evidence presented to the court, and he was held for trial.

Mr. Amato also caused the arrest of Ramon Lince, a Spaniard, who came recently from Medellin, South America, for violating the dental law, and arraigned him before Magistrate Flammer, in the Fourth District Court. Lince was practising dentistry at the Savoy Dental Parlors, No. 980 Third avenue. Lince was held under $200 bail for trial in Special Session.

THE United States Sanitary Commissioner at Constantinople, Dr. Spiridion C. Zavitziano, reports through the American Legation to the Surgeon-General of the Marine Hospital Service that, according to the official sanitary reports received from the different provinces of the Turkish Empire, there exists at present an epidemic of dengue fever in Adalia, on the Mediterranean coast of Asia Minor. In the other provinces public health is rather good. Only from Aleppo is announced an epizootic among oxen. He says:

"In Constantinople there exists always many cases of typhoid fever and some of smallpox, as well as other zymotic diseases. According to the statistics issued by the Bureau de la Mortalité of the Sanitary Board, there have been registered for the week ended September 28th, or, according to the new style, the 10th inst., two hundred deaths. I am glad to state that at the last sitting of the International Sanitary Commission the question about the way of building the hospitals in the Lazaretto of Camaran, whether they were to be built with or without ceilings, has been settled, and the necessary orders have been given to have them built with ceilings.

In conclusion Dr. Zavitziano writes: "The inhabitants of Feriklay, a suburb near Pera, where the cemetery of the Roman catholics is situated, have made severe complaints against the existence of the cemetery in the center of that suburb. Lately the cemetery has been enlarged. The International Sanitary Commission, to which these complaints have been addressed, has received

from the French embassy a paper in which it is assured that the Roman catholic cemetery is managed in such a manner that public health will never be hurt. It is said, for instance, that the cemetery is divided into four squares. In the center are the common graves, in which the corpse must be left, according to the regulations, five years, but the graves are not used for other corpses until nine years elapse. In the surrounding line of the abovementioned square the graves are left for five years, but can be kept for an indefinite time, provided a small fee is paid. Outside of these graves are those belonging forever to the families who bury there. These four squares are separated from each other by drain pipes going to two basins, which have the waste pipes by which the overflow goes to the main sewers. In time of epidemic the director of the cemetery buys unslacked lime in order to spread on the graves."

Dr. George Ben Johnston, president of the Southern Surgical and Gynecological Association, took for the subject of his presidential address at the St. Louis meeting The Prevalence of Specialism and who Should be Specialists. He divided specialists into two classes, the true and pseudo. The profession recognised the value of one, while the other derived his standing from the magic term "specialist," which was so ill-understood by the public. The real value of the specialist depended upon his broad cultivation in the department of general medicine. He would be all the better if he had a mind stored with facts, an experience derived from contact with all forms of disease and a judgment matured by observation and understanding. In fact, he said, the professional qualities of the true specialist might be likened to a massive pyramid, the finished capstone of which constituted the specialty. In the case of the pseudo specialist, this pyramid of learning was inverted, and having no base of general knowledge, it was top-heavy and unstable. The public had not been properly educated in the matter of specialism and was too much inclined to place credence in the claims of any one who called himself a specialist. The cause of this, Dr. Johnston said, was largely the fault of the profession which referred its most difficult cases to specialists, and from this the public drew the inference that all specialists were better than general practitioners. It could not discriminate between the true and the false. It was the duty of colleges and societies to institute reform in this line. Special societies should

fix the standard and require that all applicants should conform to them and colleges should also take the matter in hand, sure of the support of the public and the general profession.

Personal.

Dr. John Milton Duff, of Pittsburg, has been appointed gynecologist to the Western Pennsylvania Hospital. This has necessitated his resignation as gynecologist to the South Side Hospital, but he will continue to serve that institution as consulting surgeon and gynecologist. Dr. Duff's abilities will find a wider range in his new field and the Western Pennsylvania Hospital is to be congratulated on securing his excellent services.

Dr. A. Walter Suiter, of Herkimer, has lately been appointed by the regents of the University a state medical examiner to fill the vacancy occasioned by the death of Dr. William C. Wey, of Elmira. This is an admirable selection and Dr. Suiter will be welcomed to his new duties with enthusiasm by all the members of the examining board.

Dr. R. Harvey Reed, of Columbus, O., was elected president of the American Academy of Railway Surgeons at its last annual meeting held at Chicago. Dr. Reed is one of the founders of the academy, has been editor of its transactions from the first and will bring ability, familiarity with the work and enthusiasm into the chair.

Dr. Roswell Park is lately reported to have been in Italy and to be much improving in health. His many friends in Buffalo, as well as his pupils at the University, feel delighted at the prospect of his early return to his home recovered in health and ready to resume his professional and teaching labors.

Dr. Joseph Spangenthal, of Buffalo, has removed his office from 250 Masten street to 108 East Genesee street. Hours: 8–9 a. m., 2–4 and 7–8 p. m. Telephone, Bryant 646.

Obituary.

Dr. A. L. Hummel, of Hummelstown, Pa., died at Denver, Col., October 24, 1897, in the thirty-ninth year of his age. He was born at Hummelstown, of sturdy Pennsylvania Dutch stock, received his preliminary education in his native state, and graduated in medicine at the University of Maryland, Baltimore, in 1884.

It was Dr. Hummel's first intention to engage in the practice of his profession, but he had a strong penchant for business, though he desired to cultivate it in relation to the guild of medicine. Medical journalism afforded an opportunity for him to exercise his talents in a manner satisfactory to himself, because it kept him in touch with doctors with whom he especially delighted to associate. He had previously been engaged in newspaper work, which adapted him all the more to his chosen field. He first undertook the publication and business management of a leading medical journal and after one or two changes in this branch of the work finally engaged in medical journal advertising, which latter he developed into a successful specialty. He was undoubtedly the best-informed man in this country on the subject of medical journals, and he was so far in the lead in this regard as to be in a class by himself.

He established the Hummel & Parmele medical advertising agency some years ago in Philadelphia, which was there conducted for a few years. Mr. Charles Roome Parmele, one of the partners, soon retired to engage in business in New York, though on the organisation of the A. L. Hummel advertising agency Mr. Parmele became vice-president. About two years ago the business was removed to New York, where it is now in successful operation.

Dr. Hummel began to develop signs of tuberculosis in 1894, since which time he has resided for the most part in Colorado, though he has made incursions into Mexico and Arizona at intervals, all with a view to regain health or prolong life. He was hopeful from the first, but latterly his intimate friends have seen that he was failing in strength and vigor and that the end was not far away. At last he died somewhat suddenly, though peacefully, and his remains were taken to his native place for interment. His faithful friend and former partner, Mr. Parmele, aided at the obsequies to assuage the grief of Dr. Hummel's widow, and has kept the business in such excellent condition that she will derive a substantial benefit therefrom.

Dr. Hummel was one of the most genial, generous-souled and companionable of men, bringing sunshine into every location where he went, and in his departure has left sadness in a wide circle of friends.

Dr. Ravel B. Parks died suddenly at his home at Jamestown, N. Y., November 17, 1897, aged 48 years. He was stricken while in consultation in his office and lived but a few hours. It is supposed that heart disease was the cause of death.

Dr. Parks was one of the first graduating class of the Medical Department of Niagara University, having received his degree April 12, 1886. For a short time after graduation he practised his profession in Western Pennsylvania, and then removed to Falconer, Chautauqua County, New York, where he won honorable distinction as a physician. Recently he had taken up his residence in Jamestown, where he died.

Dr. Fletcher D. Mooney, of St. Louis, died at his home in that city, Monday, November 8, 1897, of Bright's disease, aged 41 years. Dr. Mooney was a man of marked ability, of sterling worth and one who had accomplished more than is usual at his period of life. He graduated at the Missouri medical college in 1878, and has been for many years active in teaching, in medical society work and in the practice of his profession. He was a Fellow of the American Association of Obstetricians and Gynecologists, in which organisation he gave promise of taking a foremost place. His death, though apparently sudden, has been feared by his family and most intimate friends for many months.

Society Meetings.

The New York State Association of Railway Surgeons held its tenth annual meeting at the Academy of Medicine, No. 17 West Forty-third street, Tuesday, November 16, 1897. Dr. J. Frank Valentine, of Brooklyn, presided, and Dr. C. B. Herrick, of Troy, was the secretary. The morning program included papers by Dr. Thomas H. Manley, of New York; Dr. W. B. Outten, of St. Louis; Dr. W. J. Herdman, of Ann Arbor, and Dr. L. L. Gilbert, of Pittsburg. Dr. R. H. Ecclesten, of Providence; William J. Kelly, counsel to the Long Island Railroad, and Drs. Charles L.

Dana, Reginald H. Sayre, and Landon Carter Gray and Mr. Clark Bell, of New York, took part in the discussion which followed. Although the association is exclusively of New York, there were many physicians from other states as guests.

Papers were read in the afternoon by Clark Bell, of New York; Dr. C. B. Herrick, of Troy; Dr. C. S. Parkhill, of Hornellsville; Dr. John F. Burns, of Brooklyn; Dr. W. C. Wood, of Gloversville; Dr. A. F. Palmer, of Mechanicsville; Dr. Harvey P. Jack, of Canisteo and Dr. Charles R. Phillips, of Hornellsville.

W. H. Baldwin, Jr., president of the Long Island Railway Company, made an address.

The following officers were elected: President, Dr. Clinton B. Herrick, of Troy; vice-presidents, Dr. Thomas D. Mills, of Middletown, and Dr. William D. Morrow, of Walton; secretary, Dr. George Chaffee, of Brooklyn; treasurer, Dr. Harvey P. Jack, of Canisteo.

The semi-annual meeting of the Medical Society of the County of Chautauqua will be held at the Humphrey House, Jamestown, Tuesday, December 14, 1897, under the presidency of Dr. M. N. Bemus, of Jamestown. The program includes a business session at 11 o'clock a. m., and a scientific session in the afternoon. The following work is outlined for the latter: Acute peritonitis—(1) Etiology and pathology, V. M. Griswold, Fredonia; (2) Diagnosis of, E. A. Scofield, Bemus Point; discussed by J. E. Caneen, Ripley, J. M. Brooks, Jamestown, (3) Medical treatment, Jason Parker, Jamestown; discussed by N. G. Richmond, Fredonia, A. J. Bennett, Busti; (4) Surgical treatment, Wm. M. Bemus, Jamestown; discussed by E. S. Rich, Kennedy; L. C. Green, Panama; (5) Paper, (subject to be announced,) Dr. C. M. Daniels, Buffalo, N. Y. A cordial invitation is extended to the profession of adjoining counties to be present and take part in the discussions. The Hon. A. C. Wade will address the society at the parlors of the Humphrey House in the evening, at 8 o'clock. This will be followed by a banquet. Dr. C. A. Ellis, of Sherman, is the secretary.

The American Electro-therapeutic Association will hold its next annual meeting at Buffalo, Tuesday, Wednesday and Thursday, September 13, 14 and 15, 1898, under the presidency of Dr. Charles R. Dickson, of Toronto. The secretary is Dr. John

Gerin, 68 North street, Auburn, N. Y., to whom communications relating to the meeting should be addressed.

The Buffalo Academy of Medicine held meetings during the month of November as follows :

Section on Surgery.—Thursday evening, November 4th, program : Congenital dislocation of the hip, illustrated by lantern slides, by Dr. E. H. Bradford, surgeon to the Children's Hospital, Boston, Mass., assistant professor of orthopedic surgery, Harvard medical school. Discussion by Dr. Bartow and Dr. Weigel, of Rochester. Exhibition of a case by Dr. Chauncey P. Smith.

Section on Medicine.—Tuesday evening, November 9th, program : Renal calculus, by Dr. John H. Musser, professor of clinical medicine, University of Pennsylvania. Discussion opened by Drs. Charles G. Stockton and Herman Mynter.

Section on Pathology.—Tuesday evening, November 16th, program : Recent researches in the pathology of trichophytosis, illustrated by stereopticon, by Dr. William Thomas Corlett, M. D., L. R. C. P., Lond., professor of dermatology and syphilology, Western Reserve University, Cleveland, O. Multiple idiopathic pigmented sarcoma of the skin, presentation of a case, with remarks, by Dr. Grover W. Wende.

Section on Obstetrics and Gynecology.—Tuesday evening, November 23d, program : Diagnosis and treatment of carcinoma of the cervix, by Dr. M. A. Crockett. Report of cases and presentation of specimens, by Drs. Earl P. Lothrop and Francis E. Fronczak.

The Southern Surgical and Gynecological Association held its tenth annual meeting at St. Louis, November 9, 10 and 11, 1897, under the presidency of Dr. George Ben Johnston, of Richmond. In his inaugural address Dr. Johnston made reference to the prevalence of yellow fever in the South, expressing regret that several members were detained there on that account. We make reference in another place to Dr. Johnston's annual address. The Hon. Charles Nagel delivered an admirable address of welcome, to which the president gracefully responded.

Dr. Henry H. Mudd, chairman of committee of arrangements, outlined the program of the meeting, both scientific ands ocial, and

then the reading of papers began. These will be fully reported in the journals and finally printed in the transactions. This annual volume is edited by the secretary, Dr. William E. B. Davis, of Birmingham, and is one of the most interesting records of society transactions that is published. This year promises to be no exception to the rule, judging from the wealth of material delivered at St. Louis.

On the evening of the first day, Tuesday, Dr. Mudd gave a reception at his residence that was attended by the wealth and fashion of St. Louis, who came to do honor to the visitors. The elegance of costumes in which the women were arrayed, the exquisite music and the delightful supper, all served to round up a most charming evening. The annual banquet was given at the Southern hotel on Wednesday evening, at which Dr. L. S. McMurtry, of Louisville, acted as master of ceremonies. Dr. McMurtry, whose post-prandial talents are well known, was at his best on this occasion and when he introduced Dr. I. N. Love, who made one of the principal speeches at the banquet, it was a climax. Dr. Love is always equal to a good speech, but never made a better one than on this occasion. Dr. Joseph M. Mathews, of Louisville, and Dr. R. M. Cunningham, of Birmingham, gifted also as after-dinner speakers, made notable addresses on this occasion. Next day the association elected the following-named officers: President, Dr. Richard Douglas, Nashville; vice-presidents, Drs. H. H. Mudd, St. Louis, J. A. Goggans, Alabama; secretary, Dr. W. E. B. Davis, Birmingham; treasurer, Dr. A. M. Cartledge, Louisville. Council, Drs. L. M. Tiffany, Baltimore; Geo. Ben Johnston, Richmond; Lewis S. McMurtry, Louisville; George J. Englemann, Boston; Ernest S. Lewis, New Orleans.

The next meeting will be held at Memphis, Tenn., beginning on the second Tuesday of November, 1898.

The New York Academy of Medicine held its anniversary meeting on Thursday evening, November 18, 1897, at No. 19 West Forty-third street. Dr. A. Alexander Smith delivered an address in memory of the late Dr. William T. Lusk, and the anniversary discourse was delivered by Dr. Hermann M. Biggs, on Sanitary Science, the Medical profession and the Public.

The Chicago Pathological Society will hold its regular meeting Friday, December 3, 1897, at which time Brig.-General George M.

Sternberg, of Washington, D. C., Surgeon-General of the United States Army, will deliver a lecture on the Etiology and Pathology of Yellow Fever. Members of the profession are cordially invited and tickets may be obtained either of Dr. George H. Weaver, 535 Washington Boulevard, Chicago, or from the Railway Surgeon.

Medical College and Hospital Notes.

The cornerstone of the new building for the Bellevue Hospital Medical College, at First avenue and Twenty-sixth street, New York City, was laid with fitting ceremony Saturday afternoon, November 13, 1897, in the presence of a large audience. Most of the trustees and members of the faculty of the institution were present, and many alumni attended the ceremony, while others, including several women, were present by invitation. D. O. Mills, president of the Board of Trustees, presided at the ceremony. Among the other trustees present were Samuel Sloan, the Rev. Dr. Roderick Terry, Henry H. Porter and Thomas S. Brennan. Archbishop Corrigan, who is one of the trustees, sent a letter of regret.

Among the members of the faculty were Dr. Edward G. Janeway, president; Dr. Austin Flint, secretary; Dr. Lewis A. Sayre, emeritus professor of orthopedic and clinical surgery, and Drs. A. Alexander Smith, Hermann M. Biggs, Frederic S. Dennis, Joseph D. Bryant, Austin Flint, jr., George D. Stewart, Charles L. Dana, Henry C. Coe, William P. Northrup, Henry H. Rusby, Samuel Alexander, John A. Fordyce, Henry D. Noyes, Reginald H. Sayre, Carlos F. Macdonald, Beverly Robinson and Edward K. Dunham. Among others present were Bird S. Coler, Controller-elect; Charities Commissioners Faure and O'Beirne, Sanitary Superintendent Roberts and Dr. John S. Billings, director of the New York Public Library.

The out-of-door ceremonies began at 3.30 o'clock, when a procession marched from the laboratory building to an awning that had been previously spread. An introductory address was delivered by Dr. Austin Flint, who, in conclusion, introduced Dr. Lewis A. Sayre, one of the founders of the college. Dr. Sayre, after a brief speech, proceeded to lay the cornerstone. At the conclusion of this ceremony the audience returned to the Carnegie Laboratory,

where addresses were made by Dr. Landon Carter Gray, representing the alumni, the Rev. Dr. Terry, representing the trustees, and Dr. John S. Billings, who spoke for the medical profession. The JOURNAL acknowledges an invitation to attend these ceremonies which it was compelled to regretfully decline.

THE medical department of the University of Buffalo calls upon the profession of medicine in this city and vicinity to aid it in obtaining obstetric clinical material. Cases that cannot be well cared for at home may be sent to the Buffalo General Hospital, where two members of the senior classes will sleep at night and can be called to assist in cases where paid assistance cannot be afforded. The importance of obstetric clinics cannot be overestimated. Students should not be graduated who have not had ample obstetric experience. Physicians who can aid in supplying the material needed should communicate with Dr. Mann or Dr. Van Peyma.

Book Reviews.

TUBERCULOSIS OF THE GENITO-URINARY ORGANS, Male and Female, By N. SENN, M. D., LL. D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief St. Joseph's Hospital, Chicago, Octavo, pp. vi.–317. Illustrated. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

It is only in comparative recent years that tuberculosis of the genital organs has attracted the special attention of the profession. In other words, it may be affirmed that this is, comparatively speaking, a new field of surgical pathology. The work before us is the first within our knowledge to deal with the subject in a separate treatise in a comprehensive manner.

It has been known for some time that it is possible to obtain direct tubercular inoculation through coitus, and Senn points out the fact that where the penis has been amputated for supposed carcinoma, in many instances the disease was really tuberculosis. The latter may be strongly suspected when no recurrence follows the operation. It seems to be a fact that no locality in the male genital tract is free from the liability of tubercular invasion. Thus it may appear in the urethra, in the spermatic cord, in the seminal vesicles, in the prostate, in the testicle and in the epididymis, though in not all as a primary lesion. Senn asserts that it is never primary in the spermatic cord, nor in the prostate, and rarely so in

the testicle. Parts I. and II., comprising the first eighty pages of the book, are devoted to this branch of the subject.

The author, in Part III., takes up the consideration of tuberculosis of the female organs of generation, in which he discusses most interestingly the manner of infection, the pathology and the treatment of the malady. Tuberculosis of the vulva is briefly handled in Part IV.; tuberculosis of the vagina is more elaborately considered in Part V., and direct infection by coitus affirmed.

Tuberculosis of the uterus is taken up in Part VI., and receives ample treatment at the hand of this author. The pathology, etiology, symptoms, diagnosis, prognosis and treatment are all dealt with in intelligent sequence. In treatment the only reliable method that promises cure is extirpation. Senn prefers vaginal hysterectomy to the abdominal route, because the former, he says, is attended by less risk of peritoneal infection; but in the next sentence he affirms that in all these cases it should be taken for granted that the peritoneum is already more or less affected, and advises that the parts in the vicinity of the organ removed should be iodoformised and that vaginal drainage with iodoform gauze should be established. We fail to appreciate the author's preference for the vaginal route in view of the reason given and of the facts stated afterward.

The next two, Parts VII. and VIII., are devoted to the consideration respectively of tuberculosis of the Fallopian tubes and tuberculosis of the ovaries. It is probable that tuberculosis of the tubes is much more common than has heretofore been believed. It is very often not suspected before operation and perhaps quite as frequently undetected afterward. Nevertheless, now and then, tubercle bacilli have been found in pus removed from tubal abscesses. Senn gives credit to Edebohls, Williams and Penrose in this direction. The operative treatment in these cases is unquestioned, but the difficulties of diagnosis are admittedly very great. The ovary is seldom the seat of primary tuberculosis, but when it does exist it is, according to Senn, caused by hematogenetic infection in the same manner as tuberculosis of the testicle.

Tuberculosis of the bladder is the subject of Part IX., and tuberculosis of the ureter forms that of Part X. Chronic cystitis has, no doubt, been mistaken for tubercular disease. Mistakes in diagnosis have led to improper treatment. Senn points these facts out with great cogency. The ureter is rarely the seat of tubercular disease, but occasionally is affected by the processes of extension.

The final section of the book, Part XI., comprising ninety pages, is devoted to the consideration of tuberculosis of the kidney. Here Senn is most interesting, displaying his intimate knowledge of the subject and his masterful methods in diagnosis and treatment. Here, too, is his knowledge of pathology well demonstrated. Some of the illustrations in this section are excellent, especially figure twenty-two, opposite page 234, where subcapsular nodules in a case of miliary tuberculosis are beautifully demonstrated.

The book is handsomely printed, well indexed and must take rank as one of the author's best contributions to the literature of American medicine.

GENITO-URINARY SURGERY AND VENEREAL DISEASES. By J. WILLIAM WHITE, M. D., Professor of Clinical Surgery, University of Pennsylvania, and Edward Martin, M. D., Clinical Professor of Genito-Urinary Diseases, University of Pennsylvania. Philadelphia: J. B. Lippincott Company. London: 6 Henrietta street, Covent Garden. 1897.

The authors of this valuable volume are well known to the profession by reason of their labors in this field of medicine. In more than a thousand pages of this book they have given special attention to the symptomatology, diagnosis and treatment of genito-urinary and venereal diseases, which makes it especially valuable to the busy physician. Antisepsis, the newer methods of examination and a very complete and comprehensive study of the urinary changes produced by disease, are fully considered.

Chapter I. gives the anatomy, injuries, inflammatory affections and tumors of the penis; Chapter II. treats of urethral anatomy and injuries, foreign bodies in this canal, urethral calculi and urethroscopy; Chapter III.—Gonorrhea. The causative rôle of the gonococcus in the production of gonorrhea is regarded as established. The abortive treatment should not be attempted after mucoid discharge has appeared. Copious flushings with antiseptic solutions are commended. The following is the most efficacious injection:

℞	Hydrarg chlor. corros	gr. ½.
	Acidi carbolici	gr. xii.
	Zinci sulphocarbolatis	gr. xii. to ℥i.
	Boro glycerid (25 per cent.)	℥ii.
	Aquæ q. s. ad	℥vi.

S.—Inject after urination, diluting or making stronger according to indications.

This injection is adapted to all stages of gonorrhea, the strength being varied according to circumstances. Treatment should continue until all shreds disappear.

Chapter IV. deals with gonorrhea in women and children; in Chapter V. the complications of gonorrhea are considered; Chapter VI. concerns symptoms, results and treatment of strictures. Electrolysis is unwarranted and useless in the average case. Chapter VII. tells about urethral fever, fistula, pouches, tuberculosis and cancer; cysts of Cowper's glands and care of urethral instruments.

The following six chapters treat of the protein forms of syphilis. The chapter on examination of the urine is concise and practicable. The chapter on cystoscopy and urinal tumors is a plain practical exposé of the subject, well illustrated.

Chapter XXVII.—Injuries and Diseases of the Prostate. In this chapter castration and vasectomy are fairly considered. "Cas

tration for prostatic hypertrophy, first advocated (White) in 1893, has since been performed in hundreds of cases, and with results which establish it as the safest and most radical curative operation yet proposed."

The idea of castration was suggested by the apparent analogy between uterine and prostatic growths, since oöphorectomy caused uterine atrophy, castration would cause prostatic atrophy. While embryologists deny that there is any true homology between the uterine and the prostate growth, yet there are clinical resemblances between prostatic and uterine overgrowths. The uterine growth begins as fibromyomata, and the prostatic as adenomata or adenofibromata, the difference being due to the fact that the prostate contains more glandular tissue than the uterus.

There are no reports of vasectomy for prostatic hypertrophy previous to 1895. A. C. Wood reports a death-rate of 12 per cent. following ligation and vasectomy. The prostate showed shrinkage, but more slowly than after castration. The results of vasectomy were better than those from ligation.

This volume contains 1061 pages and 248 illustrations and constitutes a condensed up-to-date library of genito-urinary and venereal diseases. B. H. D.

A GUIDE TO THE CLINICAL EXAMINATION OF THE BLOOD FOR DIAGNOSTIC PURPOSES. By RICHARD C. CABOT, M. D. With colored plates and engravings. New York: William Wood & Co. 1897.

Through an unavoidable oversight the review of this most excellent treatise has not appeared in the JOURNAL until now, some months after its appearance and hearty reception by the medical press and the profession.

Hematology is practically a new topic, yet there are several very excellent treatises published upon the subject, particularly by German and French writers. The present volume is by far the most exhaustive and reliable of those published in the English language and has attained in a few months a very flattering reputation.

The author claims that an examination of the blood gives evidence similar in kind and not much inferior in value to that obtained by examination of the urine. Both, he claims, gives us (*a*) a ready-made diagnosis in a few cases, (*b*) side lights on a good many obscure conditions, (*c*) and the frequently great assistance of a negative report. It has solved some problems where little was hoped from it and has been disappointing where much was expected—as for instance in rheumatism, furunculosis, uremia and diabetes. In the diagnosis of central pneumonia, deep-seated suppurations, ovarian tumors and in the prognosis of post-scarlatinal nephritis and pneumonia, the examination of the blood has been unexpectedly helpful. The chapters on the methods of clinical examination of the blood consider the counting of the red and

white corpuscles, the estimation of the relative volumes of corpuscles and plasma ; of the coloring matter, of the specific gravity, the examination of aired and stained specimens and the bacteriological examination.

For the blood count, the author mentions only the Thoma-Zeiss instrument—it being the most commonly used and the most accurate. v. Fleischl's hemometer is the preferred instrument for determining the amount of hemoglobin, while the Hammerschlag method is given as the simplest and most available method for estimating the specific gravity of the blood. The author almost recommends the specific gravity method for the determination of hemoglobin—it being cheaper, easier, more accurate and equally quick—than the use of the hemometer.

Part II. is devoted to a study of the physiology of the blood and only such portions as are necessary for an understanding of the small group of pathological changes, which can be profitably investigated by clinicians. The morphology of the blood, its coloring matter and its density under physiological conditions are especially noted.

Part III. is devoted to the general pathology of the blood—such as its unequal distribution, its dilution and concentration, anemia and hydremias. The most common causes of secondary anemia are given as infective and febrile diseases ; malignant disease, chronic suppuration ; bad hygiene, pregnancy and lactation ; intestinal parasites, poisons, lead, arsenic, mercury. The chapter on leucocytosis, lymphocytosis, eosinophilia and myelocytis is unusually complete. The chapters on hemoglobin, fibrin, lipemia, melanemia and hemorrhage is also full of interesting and instructive data.

Accompanying these chapters are two beautiful full-page colored plates by the author himself, portraying the different varieties of leucocytes, and the malarial parasites, also the leucocytes, lymphocytes, eosinophiles, nucleated red corpuscles, myelocytes such as are seen in leukemia and the polymorpho-nuclear neutrophiles, such as are seen in leucocytosis.

Book II., Part I., is devoted to the diseases of the blood, and chapters follow describing the blood changes in the primary anemias, chlorosis, leukemia and Hodgkin's disease. Two colored plates by the author show beautifully the microscopic appearance of the blood in lymphatic leukemia, with excess of small lymphocytes, and with excess of the large lymphocytes, and Plate IV., showing the varieties of nucleated red cells, as microblasts, megaloblasts, polychromatophilic cells and normal red cells.

Part II. is devoted to acute infectious diseases, as in fevers, pneumonia, typhoid and diphtheria, measles, scarlet fever, variola, cholera, erysipelas, septicemia, grippe, abscess, appendicitis, pelvic inflammation, yellow fever, gonorrhea, glanders, bubonic plague, actinomycosis and trichinosis.

Parts III., IV. and V. are devoted to chronic infectious diseases ; diseases of special organs and malignant diseases, blood

parasites and intestinal parasites. Then follows a chapter on the blood in infancy, its general characteristics and the anemias of infancy. These chapters abound in tables, clinical cases and deductions, which can only be appreciated by consulting the book.

The ground gone over by the author can be determined by the very complete bibliography, covering fifty-one pages and embracing the blood literature of all languages.

The work on the whole is a credit to American medicine and should find a place on the table of all progressive physicians. It would be difficult to say wherein it could be improved.

The author is to be congratulated in having William Wood & Company as his publishers, thus insuring the highest excellence in its construction. W. C. K.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XII., Mental Diseases, Childhood and Old Age. New York: William Wood & Company. 1897.

This book is entirely European in its contributions. The section of mental disease is written by G. Fielding Blandford.

We have read this section for the purpose of ascertaining his views on questions still in dispute—and not with the idea of reading his accurate descriptions of the well-known types of insanity and their treatment. We find he admits the fact of partial insanity, for he says: "These partially insane folk arrive at the point of delusion in one of two ways."

He classifies these patients as monomaniacs and divides them into monomania of pride, of jealousy, of hoarding, of persecution and of doubt. We do not consider his view as one that will meet with much favor in this country. In the United States the tendency is to deny to monomania a place in classification. We do this because the term is misleading. Such patients rarely are maniacal. Stearns more nearly represented the American view on this question when he said: "I think there can be no question that it is neither single in its elements nor maniacal in its manifestations and that the term monomania is, therefore, untrue in both its primal and terminal compositions and thus vitiates all principles of medical nomenclature."

Of moral insanity he says, and we believe most thoroughly with him, "The stage of moral insanity is one on the way to mania with delusions and sometimes a stage on the way to general paralysis." He denies the proposition that morality is a division of the mind apart from intellect. Therefore, we cannot have a moral insanity with a sound intellect. Such a statement, he truly says, is "a quibble about words."

Concerning the question, "Was the person whose act is in question able to understand its nature and to pass a fairly rational

judgment on its consequence to himself and others and was he a free agent so far as that act was concerned ?" Blandford states, "That this is the test which medical men would lay down may be assumed without hesitation." Krafft-Ebing's Psychopathia Sexualis finds no advocate in Blandford.

We are pleased to notice a reference to the late Dr. J. B. Andrews.

Idiocy is considered in 110 pages by Paul Sollier, of Paris. He considers Bourneville's classification as the most complete.

The description of various idiots, their physical and mental condition, are well drawn. The practical portion and the most interesting to the general practitioner is the discussion of treatment of Lannelongue's operation. He says: "This operation, based on pathological, pathogenic, physiological and even mechanical error, was soon entirely abandoned." The medico-pedagogic treatment of Bourneville is well described and has his indorsement.

Lombroso discusses criminal anthropology in condensed form. The article is illustrated with portraits of types of criminals. He discusses fully the therapeutics of crime. His bibliography contains but one reference to an American.

Boy-Tessier, of Marseilles, is allotted 105 pages to discuss the diseases of old age. He considers (1) normal senility; (2) the diseases of senility; (3) the modifications in ordinary disease as observed in the aged. Of Brown-Sequard's injections of testicular juice he says: "I regard this agent as of real power." The section is not one of great value, as it omits too much.

Diseases of children, by Jules Comby, of Paris, occupies about 300 pages. This section includes all the children's diseases except infectious diseases and rachitis. The various affections are treated in condensed style and include the usual discussion of such subjects.

We notice with pardonable pride a reference to Dr. Krauss's article on Incontinence of urine, published in Buffalo Medical Journal, 1891. The volume is fully up to the standard of others in the series. J. W. P.

The Origin of Disease, Especially of Disease Resulting from Intrinsic as Opposed to Extrinsic Causes. With chapters on diagnosis, prognosis and treatment. By Arthur V. Meigs, M. D., Physician to the Pennsylvania Hospital. Octavo, pp. xiv.—229. With 137 original illustrations. Philadelphia: J. B. Lippincott Co. 1897.

There is no truer statement than the following from the author's preface: "The advantages of specialism are patent; but it is certain that a wide divergence of knowledge also results from it, and that facts which belong together are often observed by persons whose lines of research lead them so often apart that for a long time the conclusion remains undiscovered. There is great need for something to counterbalance this inevitable evil result, and to bring together the facts which, isolated, are useless. The relation of clin-

ical medicine with pathology is obvious, and there can be no doubt that they are separated to the disadvantage of both." Acting upon this affirmation of fact, Meigs has industriously sought to draw nearer and nearer together the widely divergent lines of clinical medicine and pathology. That he has succeeded to a considerable degree will become apparent to anyone who studiously reads the interesting pages of his book.

Beginning with the diseases of age, to which he devotes a chapter of ten pages, we next find the author dealing with the origin of disease in a chapter of about eighteen pages, from which the book takes its title. This is a most interesting chapter, dealing with generalities which the author reduces to particulars. Next follow chapters on the blood-vessels, heart, lungs, liver, spleen, stomach, intestines, kidneys and spinal cord, in which the pathology of these several systems, organs or viscera is carefully and minutely studied. Then follow chapters on diagnosis, prognosis and treatment in chronic disease.

The value of this work consists chiefly in the fact that the observations of the author have been verified by careful post-mortem examinations, aided by a scientific use of the microscope. The illustrations are of a nature to justify an author's pride. They are all made from tissue sections (from the author's preparations, with two exceptions,) etched on steel, and the relations of the parts have been kept true to nature. Such work as Meigs is doing cannot help but advance the science of medicine and the present book is a great stride in that direction. We look to see it adopted in college instruction.

THE DISEASES OF WOMEN. A Handbook for Students and Practitioners. By J. BLAND SUTTON, F. R. C. S., Eng., Surgeon to the Chelsea Hospital for Women; Assistant Surgeon, Middlesex Hospital, London, and Arthur E. Giles, M. D., B. Sc., London, F. R. C. S., Edin., Assistant Surgeon, Chelsea Hospital for Women, London. Small 8vo, pp. 436. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

This manual departs from the usual custom in that it is written, as announced by the author, with the object of usefulness to the student for examination purposes. The senior author is well known to the professional world as an experienced clinician and writer. Therefore the success of this, his most recent literary venture, would appear to be assured. The junior author, though not as well known, has been for some years assistant to Mr. Sutton at the Chelsea Hospital for Women, hence it is to be presumed that much of the work in preparing this book was performed by Dr. Giles.

One of the first things relating to the book to be commended is the clearness with which the authors set forth the physiology of the reproductive organs. This subject is most difficult for students to understand, but here they will find substantial aid both in text and in illustration to the elucidation of this complex process. The

chapters on tubal pregnancy are also written with perspicacity and add much to the value of the manual. Sutton's knowledge of diseases of the Fallopian tubes and ovaries has been heretofore demonstrated and he and his associate have profited by further experience, as indicated in their chapters on those subjects.

The points to which we have alluded are those most enshrouded in mystery and are hence most taxing to the comprehension of the student. It is for this reason that we have dwelt upon them. The book abounds in good material that is most admirably presented and in addition to catching the eye of students it will command the respect and attention of the profession.

HYPNOTISM AND ITS APPLICATION TO PRACTICAL MEDICINE. By OTTO GEORG WETTERSTRAND, M. D., Member of the Society of Swedish Physicians at Stockholm, etc., etc. Authorised translation, by Henrik G. Petersen, M. D. Together with medical letters on hypno-suggestion, etc. Octavo, pp. 183. New York: G. P. Putnam's Sons, 27 West Twenty-third street. 1897.

This well-published book is a fair presentation of the subject as it is taught and practised at Nancy, France. The author is a disciple of Bernheim and has followed his lead. He gives us his results in cases of insomnia, habitual headache, neuralgia, paralyses of organic origin, locomotor ataxia, epilepsy, chorea, stuttering, neurasthenia, hysteria, drug habits, rheumatism, hemorrhages, consumption, asthma, heart diseases, diseases of the stomach, diarrhea, Bright's disease, incontinence of urine, children's diseases, menstrual disturbances, external diseases, like sprains and synovitis, and in obstetrics.

He concludes, after citing a number of illustrative cases, that the hypnotic treatment is of great and lasting benefit and often the only means that can secure the desired result—recovery of health.

This work would have attracted much more attention if it contained material that was new to the profession. As it is, there is not much in this book that is not found in Herter's translation of Bernheim's work, which appeared eight years ago.

In this country hypnotic phenomena have been carefully studied and observed and no such results are obtainable in our clinics as are seen in Europe. The psychic life is different here and we must not expect results of much therapeutic value. J. W. P.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Volume XXII. For the Year 1897. J. Riddle Goffe, M. D., Secretary, Philadelphia: Wm. J. Dornan, Printer. 1897.

The annual transactions of this society always appear promptly and in good form. This volume is no exception to the rule, though it is slightly smaller than the last one, but the scientific excellence of the papers is maintained at the previous high standard set by

the society. The president, Dr. James R. Chadwick, chose for the subject of his presidential address, A historical sketch of abdominal surgery, which contains many interesting facts with dates that will make it a valuable paper for reference. Dr. Thomas Addis Emmet claimed the privilege of adding a few words in confirmation of many of the facts referred to in the address, because they had transpired within his own experience. He then proceeded to give an account of a futile attempt made to open the abdomen of a young woman in 1855 at the Woman's Hospital. Dr. Sims was opposed by some of the members of the board, Dr. Stevens among the number, and desisted. Again, however, about 1860, the subject came up and Dr. Emmet assisted Dr. Sims to remove a parovarian cyst, but they did not dare to have anyone else present at the operation or ask for a consultation !

The society elected Dr. Paul F. Munde, of New York, to be president for the ensuing year—a fitting recognition of the zeal and ability of the real founder of the society. The next meeting will be held on the fourth Tuesday in May, 1898, at Boston.

INEBRIETY: ITS SOURCE, PREVENTION AND CURE. By CHARLES FOLLEN PALMER. Sexto-decimo, pp. 109. Price, 50 cents. New York: Fleming H. Revell Company, 112 Fifth avenue.

This book is written from the moral standpoint rather than from the material. If the reader of this volume expects to find an easy way of reforming the drunkard, or valuable formulæ for relieving the alcoholic, he will be disappointed. The chapter on cure deals with the psychic side. Instead of drugs and hycho-therapy, we find a discussion of the following precepts : (1) Be a man whatever you do. (2) A trained will-power is an essential to self-preservation. (3) An unselfish wife not always best for a weak husband. (4) The first step is to persuade an inebriate to enter an asylum for rest and security for a period not exceeding three months. (5) Purgation of evil thoughts of others as essential. (6) Evils of a life of ease. As will be seen from these propositions which are maintained in a philosophical spirit, the book is that of a moral idealist. As an example of this style of thought it is elevating, but not a practical help. J. W. P.

REPORT of the Commissioner of Education for the Year 1895-96. Volume I. Containing Part I. Washington: Government Printing Office. 1897.

It is interesting to note that these reports are issuing with greater promptitude than was formerly the case. An instructive chapter in this volume considers laws relating to city school boards, and among the number Buffalo is included. Among other things is mentioned the fact that Buffalo has a board of school examiners consisting of five citizens appointed by the mayor, who hold office

for five years each. One is appointed each year. The mayor-elect being a member of this board, Dr. Diehl will have two vacancies to fill when he takes office January 1, 1898. The duties of the board of examiners, inter alia, are to visit and inspect all the schools once in each term and to report their condition to the common council, including therein a statement as to the operation of the system of examinations and any suggestions they deem proper for the more efficient accomplishment of the purposes of their appointment. We have called attention to this fact to show the importance of selecting able and efficient men for school examiners.

This report abounds with information useful to educators and their coadjutors in the cause of educational improvement.

THE ROLLER BANDAGE WITH A CHAPTER ON SURGICAL DRESSING. By WILLIAM BARTON HOPKINS, M. D., Surgeon to Pennsylvania Hospital. Illustrated. Philadelphia: J. B. Lippincott Co. 1897.

It is important that a student of surgery should be taught the correct principles of bandaging early in his career. The first and best way to do this is at the bedside or in the clinic. He should be made to apply bandages under the eye of a competent instructor; he then needs a proper manual for study and reference in the intervals of his practical instruction. Hopkins has supplied just such a manual in this book, which is planned to teach by illustration rather than description. The drawings are made from photographs and have been made to portray the originals with faithfulness. This is the fourth edition of the Roller Bandage, which indicates its usefulness and popularity.

TRANSACTIONS of the Medical Society of the State of West Virginia, held at Charleston, May 19, 20 and 21, 1897. Instituted April 10, 1867.

Though West Virginia is, comparatively speaking, a new state, yet its medical society is thirty years—nearly a generation—old. The titles of the papers published herein indicate a high standard of professional and literary qualifications on the part of the members. Dr. W. H. Sharp, of Parkersburg, discusses the etiology and treatment of eclampsia in an interesting manner, in which he gives the several points of view of prominent authorities. We could wish to see this volume bound in more permanent covers.

THE AMERICAN ACADEMY OF RAILWAY SURGEONS,. Report of the third annual meeting, held at Chicago, Ill., September 23, 24 and 25, 1896. Edited by R. HARVEY REED, M. D., Columbus, O. Chicago: American Medical Association Press. 1897.

In this book is well recorded the proceedings of the American Academy of Railway Surgeons at its third annual meeting, includ-

ing papers read and discussions held. The Academy makes a creditable showing. This volume contains fifty more pages of reading matter than the last and 150 more than the previous one. This fact shows the continuous and healthy growth of the Academy. Among other illustrations the book contains a fine portrait of Dr. E. M. Dooley, of Buffalo, who was acting-secretary during the meeting at which this book was made and is surgeon of the N. Y., L. E. & W. Railway. The editor is to be congratulated upon the form and manner of the publication of this book of transactions.

ANNUAL REPORT of the State Board of Charities for the Year 1896. Transmitted to the legislature February 25, 1897. Albany and New York: Wynkoop Hallenbeek Crawford Co., State Printers. 1897.

This annual report is always full of interest if not instruction. It is a record of the transactions of one of the best organised charity commissions in the country and it has always been administered by able minds. The power which the law confers upon the board is remarkable. In addition to the duties of inspecting the various charities the board also exercises authority over their expenditures. Its functions are usually exercised in the direction of retrenchment and always, we believe, with due regard to economy. It is especially appropriate, therefore, that when the board recommends that the salary of the superintendent of the Soldiers' and Sailors' Home at Bath shall be increased from $2,000 to $3,000 a year, such suggestion should be promptly complied with, which we believe was done.

ESSENTIALS OF BACTERIOLOGY: Being a concise and systematic introduction to the study of microörganisms, for the use of students and practitioners. By M. V. BALL, M. D., Bacteriologist to St. Agnes' Hospital, Philadelphia. Duodecimo, pp. xvi.—218. Third edition, revised. Illustrated. Philadelphia: W. B. Saunders, 925 Walnut street.

The modest title page will describe this little volume as a concise introduction to the study of microörganisms. It will be especially valuable to the older practitioner, who wishes to understand somewhat the methods of the bacteriological laboratory, without going into the subject too deeply, and the student will find it helpful in the early part of his course, when the whole field of medicine is an unknown land. The facts are clearly and accurately stated and the illustrations are good.

BOOKS RECEIVED.

Lippincott's Pocket Medical Directory, including the pronunciation and definition of 20,000 of the principal terms used in medicine and the allied sciences, together with many elaborate tables. Edited by Ryland W. Greene, A. B., Editor of Lippincott's Medical Dictionary. Philadelphia and London: J. B. Lippincott & Co. 1897.

Index Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Second series. Vol. II. B. Bywater. Washington: Government Printing Office. 1897.

A Treatise on Gynecology, Medical and Surgical. By Dr. S. Pozzi, of Paris. Third revised edition. Translated by Dr. Brooks H. Wells, of New York. One volume, of 950 pages, royal octavo, illustrated by over 600 wood engravings. Muslin, $5.50 net; leather, $6.50 net. New York: William Wood & Company. 1897.

A Text-Book of Practical Therapeutics, with especial reference to the application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. With special chapters by Drs. George E. de Schweinitz. Edward Martin and Barton C. Hirst. Sixth edition, thoroughly revised and largely rewritten. In one octavo volume of 756 pages. Cloth, $3.75; leather, $4.75. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume III. Seventh series. 1897. Octavo, pp. xii.—360. Philadelphia: J. B. Lippincott Co. 1897.

A Practical Treatise on Diseases of the Skin. By John V. Shoemaker, M. D., LL. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia; Physician to the Philadelphia Hospital for Diseases of the Skin, etc., etc. Octavo, pp. xiii.—894. Third edition, revised and enlarged, with chromogravure plates and other illustrations. New York: D. Appleton & Company. 1897.

Skin Diseases of Children. By George Henry Fox, A. M., M. D., Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York; Physician to the New York Skin and Cancer Hospital, etc. Octavo, pp. viii.—166. With twelve photogravure and chromographic plates and sixty illustrations in the text. New York: William Wood & Company. 1897.

A Handbook of Therapeutics. By Sidney Ringer, M. D., F. R. S., Holme Professor of Clinical Medicine, University College; Physician to University College Hospital, and Harrington Sainsbury, M. D., F. R. C. P., Physician to the Royal Free Hospital, and the City of London Hospital for Diseases of the Chest, Victoria Park. Thirteenth edition. Octavo, pp. xi.—746. New York: William Wood and Company. 1897.

Handbook of Materia Medica, Pharmacy and Therapeutics, including the physiological action of drugs, the special therapeutics of disease, official and practical pharmacy and minute directions for prescription writing. By Samuel O. L. Potter, A. M., M. D., M. R. C. P., London, Professor of the Principles and Practice of Medicine and Clinical Medicine in the College of Physicians and Surgeons of San Francisco; Medical Superintendent of St. Mark's Hospital, etc. Sixth edition. Fully revised and greatly enlarged. Royal octavo, pp. xv.—900. Price, cloth, $4.50 net; leather, $5.50 net. Philadelphia: P. Blakiston, Son & Company, 1012 Walnut street. 1897.

A Text-book of the Diseases of Women. By Henry J. Garrigues, A. M., M. D., Professor of Gynecology in the New York School of Clinical Medicine; Gynecologist to St. Mark's Hospital in New York City, etc. Octavo, pp. 728. Containing 335 engravings and colored plates. Second edition, thoroughly revised. Price, cloth, $4.00 net; half morocco, $5.00 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

Clinical Diagnosis: The Bacteriological, Chemical and Microscopical Evidence of Disease. By Dr. Rudolf v. Jaksch, Professor of Special Pathology and Therapeutics, and Director of the Medical Clinic in the German University of Prague. Translated from the fourth German edition and enlarged by James Cagney, M. A., M. D., Member of the Royal College of Physicians of London; Physician to the Hospital for Epilepsy and Paralysis, etc. Third edition. Octavo, pp. xxv.—523. With numerous illustrations (partly in colors). Price, $6.50. London: Charles Griffin & Company, Limited; Exeter street, Strand. 1897.

Transactions of the American Surgical Association. Volume XV. Edited by DeForest Willard, A. M., M. D., Ph. D., Recorder of the Association. Printed for the Association. For sale by William J. Dornan, Philadelphia. 1897.

Manual of Gynecology. By Henry T. Byford, Professor of Gynecology and Clinical Gynecology in the College of Physicians and Surgeons of Chicago; Professor of Gynecology and Clinical Gynecology in the Woman's Medical School of Northwestern University; Professor of Gynecology in the Post-Graduate Medical School of Chicago. Octavo, pp. xxiii—596, containing 341 illustrations, many of which are original. Price, $3.00. Philadelphia: P. Blakiston, Son & Company, 1012 Walnut street. 1897.

Simon's Clinical Diagnosis. New 2d) edition, revised and enlarged. A manual of clinical diagnosis by microscopical and chemical methods. For students, hospital physicians and practitioners. By Charles E. Simon, M. D., late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 530 pages, with 135 engravings and 14 full-page colored plates. Cloth, $3.55. Philadelphia and New York: Lea Brothers & Co. 1897.

Medical Education and Registration. United States and Canada. By William T. Slayton, M. D. (Harv.), Hyde Park, Vermont. Published annually. Price, 75 cents. 1897.

Text-Book of Nervous Diseases. By Charles L. Dana, A. M., M.D., New York. Fourth revised edition. One volume, octavo, 640 pages. Profusely illustrated. Muslin, $3.50 net. New York: William Wood & Company. 1897.

Twenty-third Annual Report of the Secretary of the State Board of Health of the State of Michigan for the fiscal year ending June 30, 1895. Lansing: Robert Smith Printing Co. 1896.

Therapeutics, its Principle and Practice. By H. C. Wood, M. D., LL. D., Professor of Materia Medica and Therapeutics, and Clinical Professors of Diseases of the Nervous System in the University of Pennsylvania. A work on medical agencies, drugs and poisons, with especial reference to the relations between physiology and clinical medicine. Tenth edition, thoroughly revised. Octavo, pp. xxxi.—1033. Philadelphia: J. B. Lippincott Co. 1897.

Abbott's Bacteriology. Fourth and revised edition. Just ready. The Principles of Bacteriology. A practical manual for students and physicians. By A. C. Abbott, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania. Philadelphia. Fourth edition, enlarged and thoroughly revised. Handsome 12mo, 542 pages, 106 illustrations, of which 19 are colored. Cloth, $2.75. Philadelphia and New York: Lea Brothers & Co., Publishers

An Epitomé of the History of Medicine. By Roswell Park, A. M., M. D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Illustrated with portraits and other engravings. One volume, royal octavo, pages xiv.—348. Extra cloth, beveled edges, $2.00 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street; New York: 117 W. Forty-second street; Chicago: 9 Lakeside Building.

Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. New (2d) and revised edition. In one octavo volume of 598 pages, with 201 engravings and 13 full-page colored plates. Cloth, $4.75. Philadelphia: Lea Brothers & Co., Publishers. 1897.

Vade Mecum of Ophthalmological Therapeutics. By Dr. Landolt and Dr. Gygax. Price, $1.00. Philadelphia: J. B. Lippincott Co. 1898.

Literary Notes.

The *Philadelphia Medical Journal* is the name of a new weekly, to begin in January, 1898, under the editorship of Dr. George M. Gould. It is owned by a stock company and published by a board of trustees. Philadelphia needs a weekly medical journal and Dr. Gould is just the man to edit it.

The Medical News Visiting List for 1898 has made its appearance. It is issued in several forms, as usual—namely, weekly, dated for 30 patients; monthly, undated, for 120 patients per month; perpetual, undated, for 30 patients weekly per year and perpetual, undated, for 60 patients weekly per year. The first three styles

contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, $1.25 ; thumb letter index, 25 cents extra.

The book begins with 32 pages of printed data of the most useful sort, including an alphabetical table of diseases with approved remedies, a table of doses, sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, a diagnostic table of eruptive fevers and a full-page plate, showing at a glance the incisions for ligation of the various arteries, an invaluable guide in such emergencies.

It goes without saying that a visiting list is an indispensable part of the equipment of an active physician. This is one of the best of its kind and can be obtained by addressing the publishers, Messrs. Lea Brothers & Company, 706 Sansom street, Philadelphia, or 111 Fifth avenue, New York.

The Columbia Calendar for 1898 has come to hand. This is its thirteenth year, and its general style is the same as formerly. It contains a convenient arrangement of dates that will prove useful to busy men, and as plenty of space is reserved for memoranda, the pad may be used as a diary and as a reminder for business appointments and obligations. It is neat in appearance, takes up but little room and is both ornamental and useful for the desk, while its stand is of such character that it may be used either upon the desk or hung upon the wall.

The moon's phases are indicated in the calendar for the benefit of those who wish to have this information. The calendar is ready for distribution and all orders for it will be filled upon the day of receipt. It can be obtained by mail, prepaid, for five two-cent stamps by addressing the calendar department of the Pope Manufacturing Company, Hartford, Conn.

The *Chicago Clinic* is the name of the journal that was formerly known as the *Omaha Clinic*. It has become the organ of the Chicago Clinical School (formerly the West-side Post-Graduate School and Polyclinic).

Dr. J. Homer Coulter will remain as editor and manager of *The Clinic* under its new name and form. Address 819-823 W. Harrison street.

Items.

Beef Juice.—There is a palpable defect in beef extracts reduced to the solid, semi-solid and dry pulverulent condition. The necessary preparation of these by heat involves radical change in the organic matter, notably the albumin, an important constituent. The therapeutic utility becomes lessened and they are scarcely even auxiliary as food, whilst all stimulating property is reduced to the minimum of action. Natural beef juice—Wyeth's perfected beef juice—it is stated presents in an original organic state all the normal constituents of beef flesh, unaltered. The proprietors claim that this preparation is unquestionably the best of its class, and has an accredited superiority given to it by the most authentic and eminent medical sanction.

At the recent meeting of the American Public Health Association in Philadelphia, one of the most enjoyable and profitable of the many contributions to the special committee's arrangements for entertainment was a free tally-ho ride, given by the H. K. Mulford Company. The tally-ho's were equipped with every comfort and convenience and made frequent trips, passing through the most interesting sections of the city and a considerable portion of Fairmount Park and visiting Mulford's Biological Laboratory, where concentrated diphtheria antitoxin and allied products are prepared, and where every step in the preparation of antitoxin was observed by the guests.

These courtesies, it is needless to add, were highly enjoyed by every visitor and member of the Association who participated.

The Antikamnia Chemical Company is presenting the medical profession with a pocket medicine case that is both useful and unique. This company has succeeded in innovating a souvenir for its medical friends that will be of practical service to each recipient.

To add to its value there is enclosed in each case, in addition to the samples, a booklet entitled, A selection of practical prescriptions, being an alphabetically arranged list of prescriptions, for ready reference. The convenience with which the "Antikamnia Pocket Case" can be carried in the outside-top-vest-pocket will illustrate its further utility.

IN MEMORIAM.

J. GREIG SMITH, M. B., F. R. S. E.

FROM A RECENT PHOTOGRAPH

See page 937, Vol. XXXVI.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

A CASE OF UNUSUAL DEFECTIVE DEVELOPMENT IN AN INFANT.

Consisting of Compound Complicated Double Harelip, and Bilateral Maxillary Fissure, with Attachment of the Intermaxillary Bone to the End of the Nose: Correction of this Deformity by Plastic Operations.[1]

By JOHN O. ROE, M. D., Rochester, N. Y.

THE following case of unusual defective facial development, which I am about to detail to you, has been of so much interest to me, both on account of the extent of the deformity and of the excellent results attending the operations for its correction, that I thought it worthy of your consideration:

By the advice of Dr. Henry S. Benham, of Honeoye Falls, N. Y., a child, 5 weeks old, was brought to me from West Bloomfield, N. Y., January 6, 1897, by its parents, who wished to ascertain if anything could be done to correct a very extensive facial deformity with which the child had been born. On examination, the child was found to have a double harelip, a bilateral maxillary fissure, and a wide cleft through both hard and soft palate. This space in the jaw and upper lip was so wide that upon inspecting the mouth, the nasal passages and turbinated bodies, together with the nasal septum, were plainly to be seen; the latter hanging down between the turbinated bodies like a center-board, but deflected to the left. To the anterior portion of the septum and the end of the nose was attached the intermaxillary bone, or osseous tubercle, which, together with the integumentary tissue, should have formed the central portion of the jaw and lip.

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

The parents of the child were both perfectly well and their other child, 2 years old, was also perfectly normal. On questioning them as to the probable cause of this deformity, they stated that they could learn of no case of deformity or malformation that had ever occurred in either family, but believed this one to be due to maternal impression.

The mother said that when she was about two and a half months advanced in pregnancy her little girl, then about one year old, was laid in her arms just as it was going into a spasm. The child was gasping for breath, and working its mouth, and seemed to be dying. The strain from this excitement was so severe that she did not get over it for a long time. About two months after this occurrence, she was very much frightened by her little girl getting a pin in its throat, which she, being

FIG. 1. Child as it appeared when five weeks old, before any operative interference.

alone with the child, was obliged to remove with her finger. After this occurrence the mother felt sure that her child would be marked and her fears were fully realised.

The child, when brought to me, presented a very repulsive appearance, and the deformity seemed a very formidable one, so far as its correction was concerned. Owing to the large opening in the central portion of the jaw and lip, the child was not only unable to nurse, but was unable even to take food from a spoon, and the only satisfactory way of feeding it was to drop the milk into its mouth with a dropper; and in this manner it was fed from the hour of its birth until the restoration of the upper jaw and lip. Notwithstanding this disability, the child enjoyed good health to an unusual degree. It has suffered from none of the common infantile ailments, and up to this time, the mother states, it has not seen a sick day.

Owing to the excellent condition of the child, I advised that the operations necessary for the correction of this deformity be undertaken at once. Accordingly, the following week the child was brought to my office and on January 9th I performed the first operation. This operation consisted in bringing down into place the intermaxillary portion of the jaw, which was attached to the end of the nose. On attempting to force this intermaxillary bone downward and backward into place, the lower border of the cartilaginous septum necessarily wrinkled more or less and bent to one side.

It was, therefore, apparent that the plan generally proposed by surgeons, of forcibly breaking down this portion sufficiently to overcome its elasticity, was not only unadvisable but impractica-

FIG. 2. Representing the cleft through the hard and soft palate, showing the attachment of the intermaxillary bone to the end of the septum.

ble. To obviate this difficulty, I took out a V-shaped portion of the lower border of the cartilaginous part of the septum, according to the plan proposed by Blandin, at the same time incising beneath the soft parts the upper border, just anterior to the incision already made. The bone was then readily brought down into place on a line with the superior maxilla, and sutured to the left side of the jaw with silver wire, the two surfaces being freshened and shaved off flat and smooth so that they co-aptated perfectly throughout.

As the intermaxillary bone was only large enough to fill say about one-half of the gap in the upper jaw and, as no other osseous tissue was available for filling in the remaining portion, the thought occurred to me that it might readily be closed by slowly forcing

the parts together by means of elastic pressure, applied on the outside of the jaw. This plan was especially feasible for the reason that the child's face was naturally quite wide and a slight narrowing of the upper jaw would not make the face appear contracted or distorted. This plan was carried out with complete success, and by the 1st of March this gap in the jaw was completely closed.

When the surfaces on this side had come firmly together, they were scarified and shaved off smoothly so that they would co-aptate perfectly, as was done on the other side, and securely sutured together with silver wire.

These silver wire sutures caused no ulceration or irritation, thorough antiseptic precautions having been instituted when they

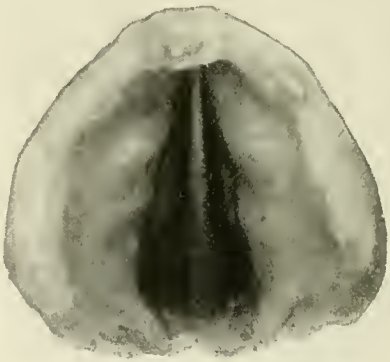

FIG. 3. Representing closure of maxillary fissure and the maxillary bone *in situ*.

were inserted; and they were allowed to remain for a considerable time, until the operations for the restoration of the upper lip had been performed, to guard against any possible loosening of this intermaxillary portion, and until it had become solidly united to the superior maxilla.

In the early part of April, the operations for the restoration of the upper lip were undertaken. As before stated, this distorted portion was covered with integument which should have formed the central portion of the lip, and which proved exceedingly serviceable for filling in the deficient floor of the nostrils and in forming the vermilion border for the lip. The floor of the nostrils was made first. This was done by uniting two flaps, one taken from the upper half of the maxillary nodule and the other from the upper and inner surface of the cleft.

When the union of these two flaps had taken place, the slight comb, or ridge, formed along their line of union was pared down so as to leave the floor of the nostrils perfectly smooth. In this manner the floors of both nostrils were formed, so that at the present time one would not suspect that they had not been normal from the first.

The cartilaginous portion of the septum, where the osseous tubercle had been united, was still very much too thick, and the skin of the column forming the anterior portion of the septum was too short, so that it drew the end of the nose downward, flattening it somewhat. This thickening was removed by lifting the skin and

FIG. 4. Representing child at ten months of age, after the completion of the work in the restoration of the jaw and lip.

mucous membrane and removing enough of the tissue beneath to reduce the septum to its normal thinness. The two sides were not operated upon, however, at the same time; one being allowed to heal before the other was disturbed. The anterior column was then lengthened sufficiently by making an oblique incision through it and sliding the flaps.

When the nostrils were completed, the lower border of the lip was formed. This was done according to Malgaigne's method by making flaps; two from the lower half of the intermaxillary nodule, one from either side, and one from the lip on each side. These were turned downward so that the raw surfaces coaptated and were sutured together carefully so that the vermilion border of the

lip was accurately formed, but made slightly more prominent at the point of union of the two flaps, to allow for contraction on healing.

A central aperture on the right side still remained. This was closed by scarifying and freshening the edges and suturing them together, the coaptation of the edges being aided by a compress, similar to Hainsley's compressor, on the outside of the face to prevent traction on the sutures.

The upper lip at first was very much shorter than the lower, but, as the child develops, this is gradually lengthening, so that at the present time but very little contraction of the lip is apparent to the casual observer, (as shown by the photograph of the child, taken last week, Fig. 5) and the scar is quite rapidly fading away.

FIG. 5. Child laughing, by which the slight contraction remaining in the lip may be seen.

Later on, should the upper jaw be found to be too narrow, so that mastication is interfered with, a portion of the centre of the lower jaw can be resected sufficiently to make the two jaws sustain their normal relations to each other.

The eruptation of the teeth has gone on quite normally and one well-developed tooth has appeared in the intermaxillary portion. The child has been for some time able to take the nipple of the bottle, and is fed in the usual manner, with no regurgitation of the food through the nose, and there have been no untoward complications.

All these operations which the child has undergone have been performed under complete anesthesia from chloroform, but notwithstanding this, the child has suffered no ill effects from its use whatever, and has not been disturbed by nausea following its administration ; also, the loss of blood has been so slight that the child has not been weakened by it in the least. The child has been so unusually good, and its appearance has improved to such a remarkable degree, that she has been dubbed, "The Belle of Bloomfield."

The only operation remaining yet to be done is the closure of the cleft in the palate. This has been deferred until the other portion of the work was completed and also to give time for the development of the tissues, for, as we know, many very wide clefts become very much narrowed during development.

It is important, however, that the closure be done before the child begins to talk, so that the child will not acquire an abnormal or perverted method of speaking.

The points in this case which are especially worthy of notice are :

1. The very wide double cleft through the upper lip, the jaw and the hard and soft palate, and the free exposure of the nasal chamber.

2. The size and amount of projection of the intermaxillary bone, and its attachment to the end of the nose.

3. The complete success attending the loosening and bringing down of this intermaxillary portion and its firm union, on both sides, to the maxilla.

4. The facility with which the aperture left in the jaw (which this intermaxillary bone was too small to fill) was closed by elastic tension applied on the outer side of the jaw.

5. The success which has attended the operations for constructing the floor of the anterior portion of the nostrils and filling in the gap in the lip, giving it quite a normal appearance.

There are two points in this subject on which surgeons differ in their opinions. One is the question of removing or leaving the premaxillary bone in cases of compound complicated harelip ; the other is the question as to the age at which the operation had best be performed.

In regard to the former question, the very best authorities differ widely. Many surgeons are of the opinion that when the premaxillary bone projects too much, it should be removed, while

others believe it is of the highest importance that this portion of the bone, if possible, be preserved.

The reasons advanced by surgeons, who advocate its removal, are:

1. That pressing the premaxillary bone back into place is difficult and unsatisfactory; and if pressed back it rarely unites to the maxillæ with bone and, in that case, will interfere with the closure of the alveolar arch and palate fissure.

2. That the teeth which it should contain (the central incisors) cannot be relied upon to come through in such a manner as to be serviceable, and that a plate made by a dentist will answer the purpose quite as well.

Other surgeons urge the preservation of the premaxillary bone for the following reasons:

1. That if the bone be removed, there must be a permanent gap through the hard palate and in consequence a flattening and malposition of the upper lip, from having lost its bony support.

2. That this flattening of the jaw will make the lip short and tense and the patient very much "underhung," an unsightly deformity.

3. That the presence of this bone is needed to preserve the normal width and arch of the jaw and best fits it for carrying artificial teeth, if such are needed, because of the unsatisfactory eruption of the natural teeth.

The advisability of preserving the premaxillary bone, it would seem, cannot be questioned, and it is in very exceptional cases only that its removal is required. Some surgeons regard its removal as but little short of an unjustifiable mutilation.

The second question, "as to the age at which the operation for harelip had best be performed," has been a subject of discussion from the earliest surgical time, and there has been no age from one day to five years, which has not been advocated by some surgeon as the most desirable time for the operation.

There are two points, however, upon which surgeons are pretty generally agreed; these are that the condition of the lesion and the health of the patient should govern the time for operating. Some surgeons advocate that the operation be performed as quickly as possible after birth, while others claim that the best time is from the fifth to the tenth week.

When the child is vigorous, well-nourished and well-cared for, the early operation is preferable; but the principal danger in oper-

ating on the newly born infant is from hemorrhage, for the reason that very young children suffer severely from the loss of blood and, in some cases, the loss of a very small amount of blood proves fatal.

It is advisable, however, in all cases, to operate as early as is consistent with safety to the child, in order to interfere as little as possible with the eruption of the teeth; for, after this has begun, all operative interference should be deferred until the first dentation is completed.

28 North Clinton Street.

SURGICAL TREATMENT OF TUBERCULAR PERITONITIS.[1]

By J. P. CREVELING, M. D., Auburn, N. Y.

IT IS comparatively recent that surgical means have become a recognised treatment in tuberculosis of the peritoneum, and the general scope, as well as the ultimate extent to which such measures may be resorted to with benefit, still remain problems for further demonstration. The brilliant results we see in some instances are somewhat clouded by the utter failure in others, but any means that presents even a fair prospect of giving more or less permanent beneficial results in a disease so uniformly destructive as tuberculosis, wherever situated, must be regarded with favor.

In a paper of this character, it is not necessary to enter into the classification of the various forms of peritonitis, as it is of but little significance to the surgeon operating whether it be given an anatomic, pathologic, etiologic or an anatomo-bacteriologic classification, so long as he recognises the conditions before him and proceeds with care and prudence to overcome the malady calling for operative intervention. I would not be understood as disclaiming the value of scientific classification of this, as well as all other diseases, but the various forms of inflammation occurring within the peritoneum or its cavity are in many instances extremely difficult of differentiation before the abdomen is opened, and if the surgeon has made good his diagnosis as to the tubercular nature of the case, he has quite well discharged his duty as far as diagnosticating the disease is concerned.

It is true, of course, that when the disease involves the mesentery, the details of the required manipulations may be somewhat

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

different from those when it is located within the pelvic cavity or has invaded the peritoneum lining the walls of the cavity. Many of these cases, when they are first presented to the surgeon, are more or less in an advanced stage, so that the morbid process is not confined to any one part, but the whole abdominal contents have become involved in varying degrees. All the viscera may be firmly agglutinated and held together in one mass and the whole peritoneum intensely inflammed. In such cases, it is impossible to locate the point of origin.

The most important question to determine before operation is whether the deposit of tubercle is confined to the abdominal viscera or whether the peritoneal involvement is only a part of a general tuberculosis. If this be the case, I believe, as a rule, it is inadvisable to operate, but there are exceptions to this.

In tubercular joint disease associated with a similar peritoneal process, a double operation, removing the diseased bone and performing laparatomy at the same time, or the two operations separately, will in many instances give a long period of relief, if not entirely eradicate the disease. Such has been my experience in a limited number of cases.

In one of my cases, where there was slight pulmonary involvement, the result was very satisfactory. All the abdominal indications ceased and the pulmonary has progressed but slowly, thus giving the patient a much longer period of life and comfort than would otherwise have been possible.

Of course, the result in such cases is always a problem, and the advisability of operating should be determined by a careful consideration of all the surrounding circumstances ; but it should not be forgotten that intervention is sometimes justifiable merely as a palliative measure, and that the severity of the operation does not preclude its adoption even in cases admitting of some doubt.

It is in the purely local form of the disease, however, that we may look for the most satisfactory results. Here, we should not be discouraged because the disease is extensive. If the general condition of the patient will admit of the operation, I believe it the proper thing to do, as it holds out the best prospects of relief, and it is this very class of cases that is liable to yield the most brilliant results. But they, too, require patience and diligence, as in most instances there will be found extensive adhesions, which should be sought and divided, if possible. The

more thoroughly this is accomplished, the better will be the chance for a complete cure, but care should be exercised lest the intestinal wall be injured. These adhesions may be so generally diffused and of sufficient strength to immobilise the bowels, which in turn are much distended by gas and weakened by disease, and, therefore, much more liable to rupture than under ordinary circumstances. Hemorrhage may be quite profuse if the adhesions are thick and well organised and should be securely controlled before closing the incision.

The advisability of removing the bowels from the abdominal cavity is questionable. While it makes a more thorough exposure, it increases the shock and risk of rupture, as a large mass of bowels fully distended by gas and suffering from paresis are not always as easily returned to their normal cavity as removed, but all tubercular foci should be searched out and, if not removed, should be incised or curetted, as manual disturbance seems in some way to enhance the chances of a satisfactory result.

In cases of general fibro-plastic peritonitis, numerous deposits of tubercle may be found in the organised exudate as well as in the abdominal viscera. In a case I operated on a few weeks since, this material was studded with tubercular nodules. This was a case, however, of secondary development, as one arm had been amputated some months before for a similar disease at the elbow. In this, the exudate was greater than I had seen before. The bowels were all adhered to each other and all firmly bound to the posterior peritoneal wall. Over the whole mass was an apron-like covering of organised plastic material, completely enclosing all the bowels and dividing the cavity into an upper and pelvic portion. In the pelvic peritoneal space was confined 168 ounces of serum. There was considerable oozing of blood during the separation of the intestinal coils, which was rather tedious, because of the strength of the adhesions. Some required the aid of the knife. The cecum could not be liberated. Although the operation was a long one, the shock was not unusually pronounced. The abdomen was not irrigated, but carefully dried, a drainage-tube inserted and the wound closed, which healed by primary union. The tube was removed on the third day, as there had been no drainage for twenty-four hours previous. This was an unfavorable case for operative measures, as the lesions were so extensive they could not all be reached and the disease will undoubtedly soon manifest itself again. It serves to illustrate the tolerance of

the peritoneal cavity to manual manipulation and at the same time has prolonged and rendered life more comfortable.

In a laparatomy I performed a year or so ago for another purpose, a large section of the omentum was discovered to be tuberculous. It was ligated and removed and as yet there has been no apparent return of the disease.

When such radical means can be safely adopted, the result of the operation is much better guaranteed than by less thorough methods, as for instance simple air exposure and the like.

The question as to how or by what means simple laparatomy proves beneficial is still in doubt. Mere exposure to the air in many instances effects a complete cure. In fact, it is claimed, and statistics seem to support the claim, that about 70 per cent. of all cases are cured by this means. (Roesch has collected 358 cases operated upon, of which number 250 were cured.) Morris, of New York, I believe, claims the result is due to putrefactive changes caused by bacteria from the air; and I understand he has taken the fluid from the abdominal cavity and after exposure to the air obtained a toxalbumin which is very fatal to the tubercle bacillus. Thomson, of Edinburgh, believes the initial incision is the essential factor in bringing about the curative result. This opinion is shared by others. Nannotti and Baciocche, after some experiments, attribute it to the mechanical influence stimulating the reparative changes in the peritoneum. Stchegoleff believes recovery is reached by the inflammatory process, that the phagocytes play the important rôle. Jordon concludes the real cause is undetermined. It is held by some that the evacuation of the fluid is a potent factor, but, then, the disease occurs occasionally without fluid.

Whatever the curative influence may be, what experience I have had has led me to believe that in fibro-plastic cases the adhesions should be carefully but thoroughly broken up, if possible; that mere exposure to air is insufficient, or at best it does not insure the favorable chances that a more complete operation does; and, on the other hand, the danger encountered is not as great as in a prolonged exposure of the intestines to the air. It also diminishes the liability of contraction of the fibrous deposit, and upon the whole is far more surgical.

In simple cases—that is, in cases not associated with the foregoing complications,—there seems to be but little doubt that mere air exposure is adequate to effect the desired result.

Lately, the introduction of sterilised air into the abdominal cavity has been tried and some rather encouraging results reported, especially in children. Now, sterilised air is not supposed to contain many putrefactive bacteria, and neither should the mechanical manipulations in introducing a trocar through the abdominal walls create a great deal of inflammatory reaction. The question, therefore, really still remains open for further demonstration.

22 South Street.

DISCUSSION.

Dr. Jacobson, of Syracuse.—My own experience with the surgical treatment of tubercular peritonitis covers a period of something like eight years. A case operated upon at that time is still alive and in perfect health. There was no question at all about the diagnosis after the abdomen was opened, but there was some doubt whether it was a tubercular peritonitis before the operation. It was one of the forms where the adhesions were so marked that the growth seemed a great deal like a cystic tumor which had fixed adhesions. In that case nothing was done but to open into this accumulation, thoroughly carry off all of the fluid, mop it out, dry and close it up. The woman had had high fever prior to the operation and for a week afterward the fever continued. Since that time she has had no further evidence of tubercular trouble, although every autumn she is put upon cod liver oil and continues it until spring.

I have had other cases recover, none, however, showing the period of immunity that this case presents. On the other hand, I have had a number of cases which have gone on to death, and in some instances I have rather been of the opinion that the operation has hastened death. I cannot agree with the suggestion of the paper quoted from Dr. Morris, that opening into a tubercular cavity favors its cure, because of the introduction of a mixed infection. Now, we know that is absolutely contrary to all surgical teachings. We know that tubercular abscesses about joints do splendidly sometimes by a let-alone or conservative treatment, until an incision is made. Immediately afterward we frequently have to deal with one of the most virulent forms of infection. Men who have studied this subject, especially Watson Janes and Sims Woodhead, in England, are satisfied that mixed infections in tubercular disease increase the trouble. Therefore, it seems to me that a mere statement of this kind, without further evidence that it is true, is insufficient to demand from us its acceptance as the theory of the cure of these cases. We do not know wherein the cases recover. And there is the other element—we are not always sure that we are dealing with a tubercular disease.

The mere presence of tumors, or tumorous masses, or tuberculous

masses, which represent in their gross appearance tuberculosis, or the larger form of tubercular nodules, is not evidence enough that they are positively due to tubercle bacilli. There must be some further evidence than this. Therefore, it may be possible that a number of these cases get well simply as an operation, *per se*, as many other forms of tumorous troubles in the abdomen recover. We cannot say yet what has cured some of these cases. And I presume others have had the same experience as I have—namely, that they have predicted the early death of cases which to all external appearances were cases of tubercular peritonitis and to their happy surprise they have found them get well without operation. It has happened to me three times that where I was satisfied I had to deal with tubercular peritonitis, operations were refused and the patients got well. Now, I cannot help but believe that there was a faulty diagnosis there, and yet there was a group of symptoms present in each case that seemed to justify such a conclusion.

Dr. CHEESMAN, of Auburn.—There is perhaps one point we might take issue on—namely, that the local forms of tubercular diseases are more amenable to treatment than the general forms. I think the statistics that the author has quoted refer in the great majority of instances to cases of general abdominal infection, to general abdominal tuberculosis, and certainly, personally, it would seem to me an easier matter to treat such a case by a simple laparatomy and irrigations, perhaps, than it is to handle a tuberculous mass localised in the abdomen. My own experience with such cases is that they are very difficult to deal with.

I have a case on hand now with a localised tubercular trouble behind the uterus, in which there is general infection. Laparatomy seems to have done away with the general tuberculosis of the abdomen so far as can be judged by the present condition of the patient, but the localised trouble is a very serious problem just now, as there is a discharge from a mixed infection from this collection behind the uterus. I don't think we know precisely why we do get recovery after laparatomy in general peritonitis.

All sorts of theories have been offered to account for it,—ventilation and the washing out and the handling and the oxygenation of the peritoneum, and various other schemes have been suggested,—but I do not think anything has stood the test of investigation as yet. At any rate, clinically we do know that local forms of general peritonitis do very well when they are simply washed out.

Dr. LICHTY, of Clifton Springs.—I have had no practical experience with the subject of tubercular peritonitis, but theoretically it is a question of great interest to me, especially after having read Dr. Victor C. Vaughn's article.

I think the statistics prove conclusively that tubercular peritonitis is cured after abdominal section. In patients who have been operated

upon for this disease and afterward the second time for other reasons, tubercles were not found which were observed the first time; and also in autopsies this same observation has been proved. Dr. Vaughn's theory is that it was due to leucocytosis, but that, of course, is something which needs to be proven. I wish further to state that he in that article also said that in cases following sarcoma or sarcomatosis of the peritoneal cavity, later found that the sarcoma had disappeared. In a patient of my own, about a year ago, upon whom the late Dr. Baker of Auburn operated, there was a sarcomatosis. This was proven by microscopical examination afterward. The patient had passed from my charge and was sent home to die, but I am hearing that the patient is getting well.

Dr. Mann, of Buffalo.—I have had considerable experience in tubercular peritonitis and have seen a good many cases get well after merely opening the abdomen and drying it out thoroughly. I have seen other cases, however, which did not get well, and I think there is a line of distinction, some points at least, where we can distinguish between those that are going to get well and those which will not get well. Where the abdominal viscera are not too firmly glued together so as to admit of their being separated and will come down and fill up the space which is made by taking out the water, and the entire abdomen is restored to a healthy anatomical condition, one might say, I think in such a case we have a very good chance of recovery; but I have seen two cases where the viscera were so firmly glued together that it was absolutely impossible to separate them. When the water was taken out, therefore, there was nothing to fill up the cavity. The pelvis and the lower part of the abdomen was simply a big hole in which watery fluid and a little blood accumulated, decomposition took place and the patient died of sepsis.

There is another class of cases which is even more likely to be fatal than these and they are cases where there is already a mixed infection before the abdomen is opened. I have seen three such that I can recall. One was a trained nurse, one is a patient in the general hospital at present, where an abscess formed between the folds on the intestines, where there was tubercular peritonitis everywhere, where there was no ascites, but a distinct abscess formation. In the case of the trained nurse there was an abscess between the folds of the small intestine. This was opened and drained, but she died. Very possibly there were other abscesses deeper down of a similar nature which I couldn't get at. Then there is one in the general hospital now. She may possibly get well; she is improving a little. She is taking nuclein by the way and she has an abscess just on top of the uterus, independent of the tubes and ovaries, but between the bladder and the uterus and the abdominal wall and intestines. There is general tuberculosis beside,

but no ascites. These are the cases which are very difficult to manage, as the author says, but where there is a mixed infection and a more localised trouble they are very difficult cases and cases which are not so apt to get well. I simply speak of them from the clinical aspect and not theoretically—that those where the abdomen is opened and a large quantity of fluid removed, where the intestines can be brought down to fill the space, have a very good chance to get well. I have seen a dozen of them get well after operation; but the other cases are not so apt to recover.

Dr. Elsner, of Syracuse.—I had an experience about a year ago at our hospital in Syracuse, which seems to throw still further doubt upon the method of cure in these cases, and seems to prove almost conclusively that the mere admission of the air and added infection is not really the agent of curing many of these forms of tubercular peritonitis. We had a young Italian who came in with an acute, far-reaching miliary tuberculosis; he had at the same time tubercular peritonitis, characteristic body feel in the upper half; in the lower half he had an abundance of fluid; he had besides this a tuberculous pleurisy. He was operated upon; the fluid from the abdomen was allowed to escape; the intestines in the upper half were found adherent; nothing further was done. We thought at that time of emptying out both pleural cavities of the fluid therein contained, but concluded to wait and see what the operation on the abdomen would do for the case. To make a long story short, the pleurisy disappeared with all abdominal symptoms and he is today perfectly well. This case ran its course in acute symptoms, commenced between three or four weeks before the operation. It is very strange, however, that this pleurisy and all evidence of pulmonary and pleural tuberculosis disappeared after the operation.

In this case there could have been no doubt of the diagnosis. In many cases I must fully agree with Dr. Jacobson in regard to the diagnosis. Even after we have opened the abdominal cavity, I think Welch, of Baltimore, and Richardson, of Boston, have shown conclusively that oftentimes we find these nodules in the peritoneum, and they are not tubercle nodules, but simply fibrous growth as the result of a long-continued latent peritonitis. Still further, the statistics show, and the very exhaustive paper which appeared a number of years ago, written by Osler, in the Hopkins hospital reports shows, that those cases are favorable where there is a good deal of fluid, and that is the general view taken today by clinicians; that those cases where we have far-reaching agglutinations which bind them and which cannot be moved are the unfavorable cases, whereas with plenty of fluid you can be pretty sure that you are going to have a better result.

Dr. Creveling (closing the discussion).—I was about to say as I closed my paper, that I do not agree with Dr. Morris with reference to

his theory of the mixed infection or the putrefactive bacteria infection. Of course, it is very much of a question at the present time what is the cause of the cure. Now, if sterilised air cures the trouble, why then surely it is not due to a putrefactive bacteria entering the abdominal cavity, or at least should not be so, and neither should it be due to the mechanical effect of operations, because there should be but very little reaction following a trocar introduced into the abdomen. Now, as a reference to diagnosis: we often see little hard nodules that to the naked eye seem very much like tubercles; they look and feel like them and the only way to discriminate is to put them under the microscope and see whether they contain the characteristic formation of tubercle or the bacillus. Regarding cases of spontaneous cure that we see reported, I have never seen one and I have but little confidence in their occurrence.

A word as to the adhesions: I agree with Dr. Mann that wherever adhesions can be broken up, that it should be done. Of course, there are cases where they are so strong, where the bowel has become so weakened with the disease that it cannot be done and it would be unwise to rupture a bowel to break up an adhesion, but in all those instances where it can be done I believe it is the proper thing to do. This is the point I wish to make in the paper and I have post-mortem observations supporting the same.

THE VALUE OF EXPERT TESTIMONY IN MEDICO-LEGAL CASES FROM THE MEDICAL STANDPOINT.[1]

By A. W. HENCKELL, M. D., Rochester, N. Y

I HAVE selected the subject, The value of expert testimony in medico-legal cases, not for the purpose of giving a lecture on medical jurisprudence, but with the object of bringing to your attention a few salient points gathered from some recent criminal cases relative to expert testimony. I cite the cases of which my paper will largely consist for the purpose of proving that medico-legal testimony, as given before our courts today, is little less than a farce and is bringing dishonor and chagrin upon the experts representing our profession, and, worse, contempt for the profession itself.

Wharton defines the "expert" tersely as "such men who are experienced in a specialty."

The present form of examining experts in insanity cases I will not dwell upon. The mode of examining experts is, usually, in the

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

form of a hypothetical question, put and paid for by the side calling the experts; in other words, the professional man testifies to certain opinions (which a man can change at will) for the benefit of the highest bidder. Has the medical fraternity reached so low a level as to forget the duties it owes to truth and veracity?

The expert should be called for the purpose of assisting the law in the obtaining of justice for the prisoner, to assist the court and elucidate certain points to the jury. The hypothetical question has many objections urged against it. Hornblower says:

> It is claimed, and with much truth, that the hypothetical question assumes as proved whatever the counsel putting the question has endeavored to prove, and combines insignificant with important circumstances and alleged facts, supported by slight and perhaps worthless testimony, with other facts of which the proof is strong and convincing, while omitting still other facts of equal or greater importance which may be overwhelmingly established by the other side.

Expert testimony based upon such one-sided hypothetical questions is almost, of necessity, favorable to the questioner, and the true remedy is that already adopted by the laws of this state in insanity cases—the appointment of a commission of experts.

The primary object of expert testimony is not to prove opinions but facts, in the shape of rules of science or art, generally recognised by those who are especially instructed in such art or science.

Lord Campbell stated, in the Tracy Peerage case, that "skilled witnesses come with such a bias on their minds, to support the cause in which they embark, that hardly any weight should be given to their evidence."

Judge Davis, of the Supreme Court of Maine, stated: "If there is any kind of testimony that is not only of no value but often worse than that, it is, in my judgment, that of medical experts."

A certain justice of the Supreme Court of our own state, in speaking of witnesses, once said: "There are three kinds of witnesses—liars, damn liars and 'experts.'"

From this it will appear how necessary it is for medical experts to free themselves from all bias and swear only to the truth, the whole truth and nothing but the truth, without fear or favor.

These criticisms are not always merited, and, if medical opinions were free from bias, such opinions would be of estimable value, as they are in Germany and France, where the expert

becomes an official and a component part of the judicial system. The objection to the expert in this country is that parties pay and retain their own experts. The question of the compensation of the medical expert is one which has attracted the attention of the profession. Although most writers on medical jurisprudence make mention of the fact that they should, or must, receive remuneration, the question, I believe, has never been decided in this state. I have the opinion of one of the justices of the Supreme Court to the effect that the question has never been judicially settled. He stated, as a reason, that no physician would risk being fined for contempt, but would rather answer the question.

In the recent Carlyle Harris trial, the most eminent experts in the state (and out of it) were called to give evidence. These men testified to facts, so-called, but they were diametrically opposed to each other. Of what value was this testimony in the obtaining of justice?

Again, in a recent murder trial in New York City, experts were on the stand, day after day, for the purpose of deciding the question whether or no the presence of human blood could be positively determined; but here again it was of no value to either side.

Some here will recall a case of alleged rape that occurred in the town of Gates, Monroe county. The Humane Society, through its agent, tried to convict—I can say with perfect frankness, he tried to convict—justice was not thought of, even by the officers of the humane society. At the hearing before the justice of the peace a female physician was put upon the stand as an expert and testified that she was of the opinion that this little 10-year-old girl had been assaulted; she was willing to say this on the ground that the hymen had been ruptured, the vagina large and roomy. It would seem impossible that a physician, at this late day, could swear that the absence of the hymen was proof positive of unchastity in the individual, but such was the case. In this case the humane society was over-anxious to convict. Their own expert, Dr. Moore, maintained that the examination revealed that the girl had not been assaulted, and on that score advised the humane society's attorney to refuse me an examination, I having been called by the defense.

Why, in the spirit of fairness, did this society not endeavor to assist in freeing the man from this accusation after their own expert's opinion had been expressed? Why was not Dr. Moore called to the stand? Why did not the prosecuting attorney

ask for the discharge of the prisoner on account of the lack of evidence? But none of it. He insisted that the accused be held for the grand jury; that he be lodged in jail, obliged to undergo the anxiety of a trial, because this woman "expert" swore that the girl had been misused. Was expert testimony of value here? Did it accomplish the ends of justice? No, decidedly not. It was a disgrace to the society prosecuting and unfortunate that the profession could not have forced its testimony. It was not until this man was brought to trial that one of the plans I advocated was tested—namely, the appointment of a commission. Three experts, appointed by the court, unbiased to the prejudice of the prisoner or the financial considerations from either side, examined the girl and their finding caused the immediate discharge of the prisoner.

I maintain that this, or a similar plan, should be adopted in all legal proceedings. That is the practice in France and Germany, and few indeed are the objections urged against it.

In the Benham case the medical expert testimony was again brought into ridicule, to such an extent that the jury practically ignored the testimony of all the experts. The reason for this was very apparent, in that the jurors were not familiar with chemistry and its intricate technicalities. It is even asserted that whilst an eminent expert was giving his testimony a number of jurors fell into temporary somnolency.

Again, in the Luetgert case, now pending, we find the experts at war with each other and exposed to the ridicule of the public. The aptness of some expert witnesses in murder trials is exemplified in this trial. One of the leading osteologists for the defense on being shown the skull of a mammal pronounced it as being the skull of a dog, describing in minutest detail its complete structure. After finishing his explanation, the prosecuting attorney informed him that it was the skull of a monkey. Recognising the pit he had fallen into, he humorously remarked it was probably a monkey-faced dog.

Considering the various phases of expert testimony, one can readily see that a remedy must be sought for and speedily put into practice, if the honored status of the medical profession is to be maintained. In my opinion there are two ways out of the difficulty. The first, the appointment of a commission by the court (I have already alluded to it in the early part of my paper); the other, the appointment of a commission of experts to receive the contentions of the experts of each side, and they to decide and present their

finding as facts to the jury and not to be subject to review. In my opinion the latter plan is freer from criticism.

116 SOPHIA STREET.

THE TREATMENT OF PROSTATIC HYPERTROPHY.

BY C. FERDINAND DURAND, B. A., M. B., Buffalo, N. Y.

PROSTATIC hypertrophy is said to be present in 33 per cent. of men over 55 years of age and in about 10 per cent. to be of pathological importance. In view of its usually insidious onset and progressive character, and from the fact that its early recognition is of the first importance, a review of the methods adopted for its treatment may not be out of place. Under the term "prostatic hypertrophy" several more or less distinct pathological conditions may be included. There may be uniform passive congestion or subacute inflammation of the entire gland, hyperplasia of the interstitial, muscular or glandular elements or distinct fibromyomata or fibroadenomata may be present.

It is the duty of the general practitioner to constantly bear in mind this condition and to warn those of his patients likely to be affected by it to inform him of any frequency of urination with which they may be troubled, so that by proper advice they may take those hygienic and dietetic precautions indicated in such cases. When men past middle age have to urinate twice during the night, and especially when the force of the stream is decreased, other pathological conditions being absent, it is an indication that the prostate may be hypertrophied.

Such men should be warned to avoid getting chilled, delaying to obey the call to urinate and excesses in eating, drinking and venery; they should keep the bowels regular, wear warm underclothing and attend to the functions of the skin.

When there are no other symptoms pointing to urinary difficulty, such treatment is likely to prove sufficient and retention will probably not occur. When, however, men of this age are obliged to urinate three or more times during the night and more often than formerly during the day, and when there is in addition some tenesmus and enfeeblement in the force of the stream, it is probable that there is some retention and they should be aseptically catheterised to determine the amount of the residual urine. When this does not exceed one or two ounces and there is no cystitis nor other pathological condition present and catheterisation is well borne, using the catheter at bedtime may be sufficient.

There are also many cases where the residual urine greatly exceeds this amount, but where cystitis is absent, in which more frequent catheterisation seems to act well. In all cases, however, when catheterisation is badly borne, when cystitis or distension of the bladder occurs, some operative measure should be undertaken and as speedily as possible.

In all such patients it is important to avoid catheterisation, which often causes a series of pathological conditions that ends in pyelo-nephritis and death.

When it has been decided to open the bladder, the suprapubic operation should, I think, be selected, as it offers exploratory advantages that the perineal operation does not afford. When the bladder is opened above the pubes the obstruction can be both felt and seen, its exact character ascertained and the necessity and kind of radical operation determined. The double operation of Belfield, who opens the bladder both above the pubes and through the perineum, is of advantage in certain cases.

Many times all that is necessary is to treat the cystitis present and afford constant drainage by having the patient wear a suitable tube, for, in course of time, the inflammation of the prostate subsides and natural urination is restored. There is no contraindication to suprapubic cystotomy, unless it be a very much contracted bladder, and the more desperate the condition of the patient the more urgently is the operation indicated. Double orchidectomy, with which the name of White, of Philadelphia, is associated, seems to act well in some instances, but, in addition to its esthetic objection, it is sometimes followed by alarming mental disturbance and considerable mortality.

Vasectomy, as recommended by Guyon, also by Daggett, of Buffalo, has also had some good results, but is only in the experimental stage. It may be that both these operations are of benefit when the obstruction is largely of a glandular nature.

The lateral prostatectomy of Dittel, Bier's method of tying both internal iliac arteries and the electro-caustic gauging operation of Bottini have found little favor in this country.

The point I wish to emphasise is the necessity of operating early. When catheterisation is for any reason badly borne, when cystitis or distension of the bladder is present, no temporising measures should be adopted, but suprapubic cystotomy should be performed.

258 Franklin Street.

Clinical Report.

TWO CASES OF PLACENTA PREVIA.

By GROSVENOR R. TROWBRIDGE, A. M., M. D., Buffalo, N. Y.

NOT that I have anything especially new in the treatment of placenta previa to offer do I report the following cases, but more because of the favorable results obtained under unfavorable conditions and surroundings by an expectant and simple treatment. So much has been said and reported by the various authorities in the management of these cases that it would seem impertinent in me to offer any new suggestions. The one fact, however, that I wish to be borne in mind is that both of these cases occurred in a section of our city which is not notorious for its cleanliness and sanitary condition ; and such being the case, I consider myself very fortunate in obtaining the results I did.

CASE I.—Mrs. R., aged 38, had given birth to eight healthy children ; no previous complications in any of her labors. I was called to see her about two weeks before she expected to be confined. There was a profuse hemorrhage and the woman was quite weak from loss of blood. From the history I learned that she had been flowing more or less for about one month and that it had increased to an alarming extent on the day I was called. An examination revealed the fact of a partial placenta previa, with a soft and patulous os dilated to about the size of a five-cent piece. I immediately placed her in bed (she had been up a greater part of the time), with the buttocks well elevated, cleansed the vagina and inserted an antiseptic tampon of gauze, at the same time ordering the triple bromides and morphine in full doses, together with stimulants. I was anticipating that labor would begin almost immediately, but was surprised the same evening to find that the hemorrhage had almost ceased and the woman was in a greatly improved physical condition with no signs or symptoms of labor coming on. I persisted in this treatment, keeping the bowels open with small enemata, and was so far successful that labor did not occur until four days before the expected time. When labor began I stripped off the part of the placenta immediately around the os and, dilating as rapidly as possible, allowed the pressure of the advancing head to act as a tampon. The labor was uneventful, although slow, but with little hemorrhage, and she was delivered of a strong, healthy child. Immediately after the delivery of the child I expelled the placenta by the Credè method, finding some difficulty, as it was quite adherent. Very little hemorrhage occurred after delivery of the placenta, and this, with rest and the use of ergot

for a week, was easily controlled. The woman made an uneventful recovery.

Case II.—Mrs. K., aged 32 years, had given birth to several children without any complications. I was called by the midwife in attendance and found a most profuse hemorrhage, which was due to a central implantation of the placenta. The woman was quite weak, and there was but very little dilation of the os. Labor was due in one week and this had been the first hemorrhage. I tamponed and ordered stimulants and small doses of morphine. This was in the morning. In the afternoon I found that strong labor pains had begun, but no apparent dilation of the os. I immediately tore a hole through the portion of placenta covering the os and stripped it away from the margins. To my surprise the placenta was almost immediately delivered and closely following came the child (breech presentation) very much cyanosed, but alive, and after a half-hour's work was completely resuscitated. There was a profuse hemorrhage for a few moments, but it was controlled by the use of ergotin and manipulation. The woman made an uneventful recovery.

I simply report these two cases, not to advance anything new in their treatment, but to show why I am of the opinion that to allow nature to do all she can without any interference in the way of induced labor and the like will accomplish good results. Considering the fact that the mortality is great in cases of placenta previa, being, I believe, about one to four in the mother's case and one to three in that of the child, I consider myself very fortunate in these two cases.

In cases of placenta previa when the hemorrhage is not great before full term, absolute rest, with the tampon (which should not remain in situ for more than ten hours), will often suffice to prevent labor from occurring before full term. Morphine or opium may be used to quiet labor pains and cool drinks allowed. The bowels must be cared for, best, I think, with enemata. "In case the hemorrhage is severe, labor should immediately be induced and the child and placenta delivered as soon as possible" (Barnes), but the severity of the hemorrhage and the mother's condition, I believe, should be very carefully considered before any radical interference is undertaken.

1331 Main Street.

Menthol for Insect Bites.—A 10 per cent. solution of menthol in ether is recommended to promptly allay the pain of all kinds of insect stings. A menthol pencil may be used instead.—*Denver Med. Times.*

Progress in Medical Science.

PEDIATRICS.

CONDUCTED BY MAUD JOSEPHINE FRYE, M. D.,
Physician to the babies' ward, Erie County Hospital.

PRE-NATAL INFECTION IN DISEASES OF INFANCY.

DAVIS (*Archives of Pediatrics*, September, 1897,) reports the result of investigations carried on for the past few years at the maternity department of the Jefferson College Hospital for the purpose of determining the cause of death in Winckel's disease. He says: With those who observe considerable numbers of infants, it is not uncommon to find cases in which a child, apparently healthy at birth, develops during the first few weeks of life a condition of apparent infection ending fatally. The predominant feature in these cases is the disorganised state of the infant's blood, manifested by hemorrhages from the bowels, sometimes from the vagina, urethra, nose, mouth and, in extreme cases, from the skin. Under the name of Winckel's disease, hemorrhagic diseases of the newborn, hemoglobinemia and other titles these cases have been variously described. In private practice, cases are not infrequently observed which do not go to the point of actual hemorrhage, but in which the newborn child gradually develops green stools, prostration, convulsions, coma and death. From analogy and from the successful treatment of some of these cases, we assign to them an infectious origin and separate them from cases of hemorrhage only by degree and not by kind.

The investigations warrant the following conclusions: No relation exists between the number of cells or percentage of hemoglobin in a given mother and the same in her infant. It cannot be said that the infant becomes hemorrhagic or develops toxemia because the mother is deficient in blood. Except in the acute infections, as typhoid and sepsis, the placenta is sterile. The feces of the infant before it has nursed may contain micrococci. In one case, terminating fatally, pyogenes albus, was obtained pure culture from the feces before nursing; a possible pre-natal infection. The mother's milk before the child has nursed may contain micrococci, affording in these cases a ready explanation of the infection. In conditions of maternal toxemia the same poison which affects the

mother is transmitted to the child in some cases by substances other than bacteria.

Bacteriological investigation of three cases of hemoglobinemia discovered a germ, resembling that associated with yellow fever, present in the blood in severe cases which is capable of transmission through pregnant animals to their young.

The treatment most successful in these cases and that which the bacteriological examinations of the milk and feces show to be rational, is copious intestinal irrigation with normal salt solution. Calomel was of little value ; the ordinary laxatives, as castor oil, without result. Partially digested Pasteurised milk must in some cases be substituted for breast-feeding.

ANEMIA FOLLOWING DIARRHEA.

JOHNSTON (*Archives of Pediatrics*, August, 1897,) calls attention to the obstinate anemia sometimes following diarrheal diseases. The digestion is weak, the appetite capricious, assimilation is imperfect. Such children fail to gain on cod liver oil and iron, as ordinarily given. A successful plan of treatment may be carried out by observing two points : to aid digestion and to give an easily assimilated form of iron. The writer has found rhubarb and soda for the digestive trouble, combined with pepto-mangan for the anemia, to act admirably in these cases, attention, of course, being given the diet.

OPERATION FOR INTESTINAL OBSTRUCTION IN AN INFANT.

ROGERS (*Medical News*, October 2, 1897,) reports a successful operation for intestinal obstruction in an infant 64 hours old. Repeated doses of castor oil and intestinal irrigation had failed to move the bowels. During the thirteen hours preceding the operation fecal vomiting occurred three times. Just prior to the operation there was some distension of the abdomen, the pulse was 145, the child was sleeping quietly and the symptoms did not seem urgent. The abdomen was carefully washed with soap and water and sponged with a 1–60 carbolic acid solution, no scrubbing or hard rubbing being done. The cord was trimmed down as closely as possible and the stump carefully touched with a 1–20 solution of the same acid. An incision was then made in the median line, circling the umbilicus and extending as far as possible in both directions. At about its middle the small intestine was

found closely bound down to the posterior portion of the cavity by a transverse band, which passed directly across, but was not adherent to the gut. This band appeared like the omental bands commonly seen leading into hernial sacs. It was ligated and the central portion cut away. The intestine above the obstruction was much distended; below, it was contracted to the size of a little finger. Considerable oozing took place, the blood being taken up on sponges. No flushing or irrigating was done. The incision was closed with silkworm gut sutures and a sterile dressing applied. The child was under the anesthetic thirty-five minutes. Seven hours after the operation the bowels moved. The child was stimulated by spartein, hypodermically, in doses ranging from 1-16 to 1-24 grains. The stitches were removed in a week, the wound being perfectly healed. The infant subsequently gained rapidly.

PHYSIOLOGICAL CHEMISTRY.

Reported by JOHN A. MILLER, Ph. D.,
Professor of chemistry, Niagara University.

DIGESTIBILITY OF CACAO BUTTER AND OF BUTTER FROM COW'S MILK.

BOUROT and F. Jean (*Compt. Rend.*, 1896; *J. Chem. Soc.*, 1897). Cacao butter is used as a food in many countries, and the present experiments show that it has a high nutritive value. Ordinary butter was digested to the extent of 95.8 and cacao butter to that of 98 per cent.; in both cases, therefore, a very small residue of fat was found in the feces.

COAGULATING AND TOXIC PROPERTIES OF THE LIVER.

A. Mairet and Vires (*Compt. Rend.*, 1896; *J. Chem. Soc.*, 1897). An aqueous extract of rabbit's liver was injected intravenously into other rabbits and found in certain doses to cause death; the blood was found to be coagulated in the heart and veins. By heating the extract a coagulum is obtained; this contains the substance which produces the intravascular clotting; the filtrate is, however, still toxic, although it does not coagulate the blood.

TRANSFORMATION OF FAT INTO CARBOHYDRATE IN THE ORGANISM.

J. B. Auguste Chauveau (*Compt. Rend.*, 1896; *J. Chem. Soc.*, 1897). In a starving animal and during hibernation, the sugar

which still persists in the blood must originate from either fat or proteid. Further, in hibernation Regnault and Reiset showed that the respiratory quotient was very low and the great excess of oxygen retained over carbon dioxide given out leads to an actual increase in weight of the animal, but it loses its fat.

BIOLOGICAL RELATION OF CHLOROPHYLL AND HEMOGLOBIN.

MARCELLUS NENCKI (*Ber.* 29 ; *J. Chem. Soc.*, 1897). Schunck and Marchlewski have shown that phylloporphyrin, $C_{16} H_{18} N_2 O$, a substance obtained from chlorophyll, is nearly related to hematoporphyrin, $C_{16} H_{18} N_2 O_3$; hemin and phyllotaonin are also similar and form similar compounds, this similarity extending to spectroscopic appearances. It appears, therefore, that the basis of blood pigment and leaf pigment is the same. In the view of the Darwinian hypothesis, and the essential unity of living things, such a discovery is of value.

FORMATION OF UREA BY OXIDATION.

F. HOFMEISTER (*Arch. Exp. Path. Pharm.*, 37 ; *J. Chem. Soc.*, 1897). With the exception of Béchamp's unrecognised attempts, the formation of urea from albumin or other nitrogenous substances has not been proved. Schultzen and Nencki showed that the nitrogen of amido-acids is excreted almost entirely as urea, and Knieriem proved that even ammonium salts are changed into urea in the animal organism. The most general view, therefore, of the origin of urea is that the final products of oxidation, carbon dioxide and ammonia form urea with elimination of water. Drechsel has shown that, by hydrolysis, only a small portion of the nitrogen of albumin is eliminated as urea.

By oxidation of a great variety of substances with potassium permanganate the author has obtained urea, often even in considerable quantity. The substance was oxidised in aqueous solution, with addition of ammonia and ammonium sulphate, by means of a quantity of potassium permanganate, nearly sufficient to convert it into carbon dioxide, water and urea. Decolorisation took place in times varying from a quarter of an hour to several days. The liquid was then filtered ; the filtrate evaporated almost to dryness at 40–50°, and the crystalline mass digested 10–12 hours, with 96 per cent. alcohol. The filtrate was evaporated, and to the residue, dissolved in alcohol, half its volume of ether was added and the

whole then filtered and evaporated. The presence of urea in the residue was proved by preparation of the nitrate and its microscopical examination, or, when in sufficient quantity, by determination of the melting point and estimation of the nitrogen. Urea was proved to have been formed in the cases of hydrocyanic acid, thiocyanic acid, formamide, glycocine, oxamic acid, aspartic acid, asparagine, leucine, gelatin, egg albumin, methyl alcohol, ethylene glycol, glycollic acid, acetone, lactic acid, malic acid, tartaric acid and pyrogallol.

The substances which, on oxidation with permanganate, did not form urea, such as acetamide and oxamide, are also unchanged in the animal organism ; whereas, oxamic acid which yielded urea is also oxidised to urea in the body without previous formation of oxalate. It is still uncertain, however, as to whether this natural synthesis of urea is one of oxidation and elimination of water, but such an assumption does away with the necessity of attributing a special function to the liver, as this organ is found to be especially capable of oxidising fatty substances. The author's observation that the liver contained no cyanic acid is opposed to the view that the formation of urea is analogous to its production from ammonium cyanate.

ACTION OF SUPRARENAL EXTRACTS.

SWALE VINCENT (*Proc. Physiol. Soc.*, 1897 ; *J. Chem. Soc.*, 1897). Large doses of extracts of the suprarenals of mammals, injected subcutaneously, caused death ; the most marked symptom is muscular paralysis of central origin. Blood in the urine, and from the nose, occasionally convulsions, and fall of temperature, were also observed. Glycerine extracts cause local ulceration. Extracts of the cortex of the gland, or of the liver, spleen and kidney are inactive. After a sub-fatal dose, a partial immunity is set up.

ACTION OF OXALIC ACID AND ITS DERIVATIVES ON THE KIDNEYS.

W. EBSTEIN and A. NICOLAIER (*Virchow's Archiv.*, 1897 ; *J. Chem. Soc.*, 1897). The investigation was undertaken with a view to the artificial production of urinary calculi. This was not accomplished, and the present communication relates to the action of oxalic acid and certain of its derivatives on the kidneys when administered in a succession of small doses to dogs and rabbits. Oxalic acid was found to cause the appearance of a deposit of

calcium oxalate in the urinary tubules; these deposits are frequently visible to the naked eye. Oxamic acid is eliminated as a calcium salt in the urine.

THE WORK OF DIGESTION AND THE EXCRETION OF NITROGEN IN THE URINE.

N. V. RIAZANTSEFF (*Arch. des Sci. biol. St. Petersburg*, 4; *J. Chem. Soc.*, 1897). The increase in the urinary nitrogen which immediately follows a meal is believed to be due to the increased work of digestion. Foods which produce an increased activity of the secreting glands act in this way more efficaciously than those which produce less activity, but even acidified water (introduced, in a dog, into the stomach by a fistula,) causes the glands to secrete, and this is followed by a rise in the nitrogen excreted in urine.

ACETONURIA.

FELIX HIRSCHFELD (*Centr. Klin. Med.*, 17; *J. Chem. Soc.*, 1897). In healthy persons a diet of proteid and fat leads to an increase of acetone in the urine. The addition of carbohydrate to the diet causes this to disappear. This is explained by its "sparing" action on proteid metabolism. The same holds in the acetonuria of disease and explains the occurrence of acetone in diabetics, in whom carbohydrate metabolism is upset.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.
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OPERATION FOR DIVERGENT STRABISMUS.

CHARLES BELL TAYLOR (*Medical Press and Circular*, March 10, 1897,) corrects divergent strabismus by the following method: He hooks up the tendon of the internal rectus muscle and divides all its connections with the eyeball, then pulls it well forward and, by two horizontal incisions made with scissors, converts it into a narrowish strip. He then transfixes the base of this strip as far back in the orbid as possible with a large curved needle connected with a thread, armed at both ends. Before draw-

ing the thread through he cuts off as much of the tendon as may be considered necessary. With the remaining needle he pierces a small portion of the sclerotic about the site of the insertion of the inferior rectus tendon and, having thus secured control of the eyeball, turns it inward to any required extent by simply tying the thread. The only portion of the procedure which presents any difficulty is the piercing of the sclerotic. To overcome this he uses needles of the same caliber throughout and as sharp as possible and makes the insertion of the thread the first step of the operation.—*American Journal of the Medical Sciences*, August, 1897.

THE ETIOLOGY OF DACRYOCYSTITIS.

Dr. A. A. Foucher, (*Ophthalmic Record*, October, 1897,) of Montreal, at the recent meeting of the British Medical Association, presented a paper upon The Etiology of Dacryocystitis, in which he says : There exist numerous causes of dacryocystitis, but its principal element lies in the unhealthy constitutional state of individuals. This conclusion is arrived at after the study of 273 cases. The adjuvant causes, inflammation of the adjoining parts, change in pathological character of secretion passing through ducts being brought about by debilitating diseases, *i. e.*, variola, tuberculosis, syphilis and the like. Women are more prone to the affection, being of a weaker constitution, are more often ill, pass through critical periods, menstruation, parturition and lachrymation, uterine troubles and menopause, all of which affect the lachrymal ducts more or less, to say nothing of the impressionable nature of women and the very frequent causes which act by reflexion on their lachrymal ducts. Apart from this, the system being prepared by some constitutional unhealthiness or another, interior and exterior infections are favored. Circumstances being now propitious to the production and cultivation of organic microbes and the organism being powerless to render the evil certain, diathesical manifestations appear and among them we classify dacryocystitis.

EUCAINE ANESTHESIA.

Jos. E. Willetts, M. D., (*Medical Review of Reviews*, Nov., 1896,) Pittsburgh, ophthalmologist to the Eye and Ear Hospital of Pittsburgh ; otologist to the Roselia Foundling Asylum, in an address

on Ophthalmology, delivered at the meeting of the Medical Society of Pennsylvania, May 19, 1897, says:

"The new local anesthetic, eucaine hydrochlorate, is a decided irritant. The anesthesia of an eucainised eye is accompanied by an hyperemia of the entire conjunctiva which outlasts the anesthesia. Experiments have shown that it also causes a lachrymal hypersecretion. These two factors alone debar it from ophthalmic practice. In corneal ulcers, foreign bodies and the like, the predominant symptoms are photophobia, lachrymation, congestion and pain. The application of this drug relieves the pain, but increases the conditions that produce it. The makers of the drug, when they recommend it in ophthalmic work, ask the ophthalmologist to ignore the fundamental basis of the science of medicine and treat effect instead of cause. Its sole claim to ophthalmic work are its stability and that it does not cause exfoliation of the corneal epithelium. The former ought not to be considered, as the expense incurred for a fresh solution of cocaine hydrochlorate is slight and the latter advantage is not sufficient to cover the other objection.

TREATMENT OF SYMPATHETIC OPHTHALMIA BY THE EXTRACT OF THE CILIARY BODY OF THE OX.

Louis Dor (*Gaz. Hebdomad.*, Ann. 44, No. 50,) has been led by theoretic considerations, including the idea that sympathetic inflammation of the eye results from an altered composition of the intraocular fluids, to try the effect of the instillation into the conjunctival sac of an organic extract prepared by macerating the ciliary body of the eye of the ox. He reports the case of a man who was attacked with sympathetic ophthalmia one year before, and in whom removal of the exciting eye, and subsequent active treatment, including mercurial inunctions and injections, and iridectomy, had failed to prevent blindness, with pain and hyperemia of the eyeball. The regular instillation of the extract of the ciliary body was followed by great improvement in all his symptoms, his improved vision allowing him once more to find his way alone.

In another case of less severe sympathetic disease the improvement under the same treatment was equally noticeable.—*American Journal of the Medical Sciences*, October, 1897.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

INFLAMMATION OF JOINTS IN GONORRHEAL PATIENTS.

E. J. SENN (*Medical Record*, July 31, 1897). The term gonorrheal arthritis indicates the etiology and pathology of the joint complications following gonorrhea, although it is the exception to find the gonococci in the joint's exudate. Gonorrheal rheumatism has been recognised for centuries, but its specified nature was not demonstrated until the discovery of the gonococcus. Even at that time metastases of gonorrheal origin have been sufficiently proven to establish a common derivation. It is claimed that gonorrheal arthritis is not a common complication of that malady, yet in a large number of cases it is erroneously diagnosticated as tuberculosis, rheumatism or some other malady. Its cause is often overlooked, because it occurs in the latter stages of gonorrhea or as a result of chronic posterior urethritis, unrecognised or unappreciated.

Many theories have been proposed to explain the etiology of gonorrheal rheumatism. The discovery of the gonococcus opened a way for the study of the pathology of gonarthritis. Rosalimus and Lewin believed that the specific toxin produced pathologic conditions through reflex action on the vasomotor nerves. Senator explains the cause as the local irritation affecting the trophic nerve fibers. Guyon and Janet believed that the gonococcic ptomaines cause the metastasis. Shuster refers the cause to a combination of syphilis and gonorrhea. Diday believed that the gonorrheal poison causes complications through rheumatic diathesis. Theiry maintains that there is no direct connection between gonorrhea and the rheumatic diathesis. Peter and Bouillard alleged that gonorrheal arthritis is due to rheumatism. Duboc said it was due to a gouty diathesis, because later in life it is often polyarticular. Tommasoli and Hutchinson considered gonorrheal arthritis only articular rheumatism. Garrad said it is due to anemia. Loeb said it is due to the gonorrheal process in the posterior urethra, which acts as an infecting antrum for the passage of the pus microbe into the lymph and blood streams and then to the locus minoris resistantiæ in the joint. Fournier believed gonarthritis due to injury of the urethra and called it urethral rheumatism. Panas stated that catheterisation arthritis is due to infection through erosion, causing kidney congestion from septicemia and consequent uremia and resulting

arthritis. Ricard and Bergh thought gonarthritis due only to chronic posterior urethritis. Bond believes the joint complications are caused by inflammation of the prostatic veins and not of the lymphatics, since the lymphatics are affected early in the disease and such lymphatic inflammation is not followed by joint complications. Guerin, Loraine and Lesigne consider gonorrhea a general disease, because it produces remote complications. The local manifestation is a period of incubation and remote complications may not ensue if the disease is arrested at this period.

Gonarthritis is due to the invasion of the gonococcus. Paltauf and Long found gonococci in joint effusions and demonstrated their character by cultivation. Many others have failed to find the specific microbe. Hewes reports two cases in which he found the organism in the blood. Joint inflammation is most often found in young adults and has the appearance of a primary osteoperiostitis. Gonorrheal microbes may cause general infection and arthritis without being germinated in a specific urethritis. Several observers note its following blennorrhea neonatorum. The disease is usually monoarticular and may affect any joint, but most frequently attacks the knee, elbow or wrist. One attack does not render immunity to another. Recrudescence of the urethritis, or a new attack, is followed, almost without exception, by joint complications in cases once having had gonarthritis. Catheterisation is liable to cause exacerbation of joint symptoms. Basset reported a patient who had gonorrhea five times in one year, presumably an autoinfection, followed each time by arthritis.

During the acute inflammation the gonococcus rarely leaves its habitation, the mucous membrane, but after the acute symptoms subside the latent microbe emigrates, in some unknown way, by means of the blood or lymph and settles upon a serous membrane. Upon mucous membrane the gonococcus is a pus microbe; upon serous membrane it plays an inferior rôle and excites plastic inflammation. Burnstead says that gonorrheal rheumatism is essentially a hydrarthrosis and suppuration rarely occurs. If suppuration does occur, it is the result of a mixed infection.

Aubert says the blennorrhagic secretion is alkaline and that the gonococcus thrives on membranes that are alkaline in reaction. The peritoneum and synovial membranes are similar and are forms of mesoblastic tissue, so we may consider, as pointed out by Sinclair, the two different rôles played by gonococci on tissues of different embryological origin.

Gonococcus causes purulent inflammation of mucous membrane and adhesive inflammation in connective tissues.

Kornig classifies gonorrheal arthritis: 1. Hydrops articularis. 2. Hydrops articularis sero-fibrinosus et catarrhalis (Volkman). 3. Empyema of joint. 4. Phlegmon of joint.

The simple hydrops is the mildest and tends to definite healing. The fibrinous form is characterised by flocculent hydrops and a tendency to cause anchylosis. The third form is rare. The phlegmonous type is characterised by a severe form of inflammation, with erosion and disintegration, thickening of capsule and ligaments, phlegmon of connective tissues and often accompanied by inflammation of bursæ and tendon sheaths.

The clinical history of gonorrheal patients and their joint complications are variable. The arthritis may be acute or chronic and seldom appears during the acute stage of gonorrhea, generally about six weeks after the primary symptoms of the urethral inflammation. There is a peculiar swelling of the knee-joint, almost diagnostic, most marked in the upper part of the joint under the vasti muscles. Fluctuation and odema are present and the muscular structures of both the leg and thigh atrophy. The urethral discharge ceases during the acute stage of arthritis and reappears with its decline. Chronic gonarthritis comes on insidiously and gradually fills the joint with a catarrhal transudation, a condition that simulates tubercular hydrops. Before adult life we may find tenderness over the epiphysis, due to primary osseous tuberculosis and secondary synovitis. This diagnostic sign is not present in adults, as the synovial tuberculosis is primary. Diagnosis is made up from the clinical history, macroscopical and microscopical examination of the aspirated joint contents.

Kornig believes that in every case of acute catarrhal inflammation of joints the urethral secretion should be examined and that ninety-nine in every hundred will be found to be gonorrheal in origin if there be a blennorrhagic discharge. Undoubtedly, many cases of gonorrheal hydrops are diagnosticated and treated as tuberculous affections. The prognosis as regards mortality is favorable; as to local functional results is very grave.

The treatment rests upon its etiological basis, which is both active gonococci and predisposing rheumatic diathesis. The salicylates act favorably, but do not shorten the disease. The alkalies, salicylates, salol, lithium carbonate and citrate of potassium are antirheumatic and anti-blennorrhagic. Iodide of potassium produces

good results. Jullien claims that oil of wintergreen comes nearest to a specific.

R. W. Taylor reports favorable results in twelve cases. Mercurial plaster may be applied to the swollen joints. The original focus should not be lost sight of; it should be actively treated. Ricard and Berg believed that posterior urethritis is necessary for gonarthritis. The joint should be held on a splint to immobilise it and hot fomentations applied during the acute stage; later, absorption of the effusions promoted by mechanical pressure, by external medication or drawn off by puncture. Jullien recommends ichthyol and lanoline, equal parts. The French use vesication in para-articular processes and Kornig applies tincture of iodine in the phlegmonous form; in the hydropic form he taps the joint and injects carbolic acid. When the hydrops are sero-fibrinous, aspiration and injection is especially indicated. Fürtterer, of Chicago, injected half a drachm of the oil of sandal-wood into the affected joint, with brilliant results, in four cases. In cases of empyema, incision and drainage are indicated. Christien advises prompt arthrotomy in all cases, followed by immobilisation and massage. If there are erosions, counter-extension is to be applied. Massage, active and passive motion, should be employed to avoid anchylosis.

TWO HUNDRED AND FIFTY CASES OF GONORRHEA TREATED BY LARGE DOUCHES OF PERMANGANATE OF POTASSIUM.

Dr. Hogge concludes (*Charlotte Medical Journal*): (1) Janet's method is abortion in one-fourth of the cases if seen within forty-eight hours after purulent discharge has appeared. (2) Large douches of permanganate of potassium and lime assure absolute cure in nearly every case of gonorrhea, if treated from the beginning, or if treated rationally until the method is established. (3) This method assures a minimum of complications. Folliculitis and prostatitis are but little influenced by irrigation. (4) It is not necessary to douche the posterior urethra systematically. (5) Weak solutions (1 to 8000 or 1 to 5000) produce the desired result. Strong solutions retard cure and may produce complications.

THE GONORRHEAL INFLAMMATION OF THE JOINTS, BURSÆ AND TENDON SHEATHS.

Neisser states that these maladies may be recognised, although the presence of gonococci may not be demonstrable. The appear-

ance of these complications is variable in time, with different subjects depending upon the rapidity of the invasion of the mucous membrane and deep structures. The older cases more frequently develop joint complications.

These complications occur regardless of the locality of the infection. The joints most exposed to traumatism are most frequently attacked, as the knee in the male and wrist in the female. There is danger of anchylosis from mild attacks, due to contractions of the synovia and the peri-articular tissue. The effusion is usually scanty and sero-fibrinous in character. Rarely, the attack begins with pyemic symptoms and purulent effusion. In such cases the cartilaginous surfaces of the bones are destroyed, causing caries and necrosis. Tendo-vaginitis may occur, isolated or in conjunction with the joint lesion. These conditions in combination point to gonorrheal origin.

Inflammations of the wrist and ankle bursa are more rare, are extremely painful and obstinate, and associated with cicatricial induration. There is a peculiar tissue proliferation in and around the joint. Relapses are very prone to occur as long as the primary infection exists or a new one has been contracted. Local treatment consists of compression, rest, immobilisation, massage, warm baths and Preisnitz bandages.

Effusion and swelling call for puncture and injection of iodoform. In severe cases, drainage is indicated. Mild astringents should be used for treatment of the primary disease. Irritating injections should be avoided lest they induce fresh metastases.

OBSTETRICS, GYNECOLOGY, PELVIC AND ABDOMINAL SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
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PORRO OPERATION SUCCESSFUL TO MOTHER AND CHILD.

F. BLUME, Pittsburg, (*Jour. Am. Med. Assoc.;* also quoted in *Am. Jour. Surg. and Gynec.,*) gives an account of a successful Porro operation. The patient was 38 years old, mother of four children. On examination, June 18, 1895, the uterus was found to correspond in size and position to an eight months' pregnancy. The pelvic cavity was almost completely blocked with a dense ovarian tumor. The cervix uteri, high up and pushed to the right, could only with difficulty be reached by passing the finger

between the tumor and the pubes. An attempt to push the tumor back was not successful. The question arose: Could the tumor be removed without interrupting pregnancy? If so, immediate ovariotomy would probably be the safest method of procedure. Ovariotomy, however, before the uterus was emptied of its contents was deemed impossible on account of the location of the tumor and its inaccessibility. Condition of the patient being good, it seemed to be proper to postpone interference in the interests of the child. Dr. Blume advised the Porro operation with removal of the growth and decided to operate a week before term. Operation was, therefore, performed July 12, 1895. Long incision. Uterus delivered from the abdominal cavity, the upper part of the incision closed to prevent escape of the intestines. A rubber ligature loosely applied around the cervix, to be tightened in case of hemorrhage. Uterus incised, membranes ruptured and the child delivered. The cord cut between forceps and the child handed to an assistant. Cervix constricted with the rubber ligature, transfixing pins applied, the placenta removed and the uterus amputated. The tumor, which arose from the left ovary and was bound down by adhesions, was enucleated, lifted out, ligatured and cut away. Peritoneum sewed around the stump below the rubber ligature. Abdominal incision closed and stump dressed with iodoform and iodoform gauze. The tumor, which was larger than a child's head, proved to be a multilocular cyst. The patient made a splendid recovery. The child, a fine boy weighing nine pounds, was put to her breast on the third day following the operation and lactation continued uninterruptedly. Both are now in excellent health. Upon examination, the cervix uteri is found very small, attached to the abdomen and giving no inconvenience. No ventral hernia.

ECTOPIC PREGNANCY.

H. W. Longyear (*Ann. of Gyn. and Ped.;* quoted also in *Med. Standard*) reports seven cases of ectopic pregnancy and recapitulates as follows:

Diagnosis.—(1) In examining pelvic affections of women of fruitful age, the possibility of ectopic pregnancy should be in the mind of the examiner. (2) A sudden attack, in such a woman, of sharp pain in the abdomen, attended with faintness, from which the woman does not soon recover, as from ordinary faintness, should direct attention to ectopic pregnancy as a possible cause.

(3) Distension of the bowels by flatus is characteristic of intraperitoneal hemorrhage. (4) Free fluid in the abdominal cavity can usually be demonstrated by percussion with change of position, in cases of intraperitoneal rupture. (5) The presence of intraperitoneal blood cannot be satisfactorily demonstrated by vaginal examination, as can the hematocele held tightly within the folds of the broad ligament, while in the pelvic and abdominal cavities the blood flows loosely and, except in rare instances, imparts no characteristic sensation to the examining fingers. (6) Pelvic hematocele, of traumatic origin, is usually, if not always, the result of a ruptured ectopic pregnancy. (7) A low febrile action, which is out of proportion to the other symptoms, is characteristic of ectopic pregnancy. (8) General peritonitis is not a result of ectopic pregnancy. (9) The discharge from the uterus, if a decidual membrane, is a valuable sign and when accompanied by unusually irregular menstruation, is of still more value.

Treatment.—(1) In all cases of intraperitoneal rupture, operate as soon as the diagnosis is made; do not wait for reaction to occur. Support such patients before and during the operation by application of heat to the extremities and back, transfusion of normal saline solution, rectal use of beef tea and saline solution and strychnia, nitroglycerine and digitalin by hypodermic injection. (2) If the hemorrhagic blood cannot be quickly removed, let it alone and use drainage. Do not flush the abdominal cavity to remove blood. The peritoneum will absorb the blood with much less danger than is caused by such manipulation. (3) Use silkworm gut "en masse" to close the abdominal wound, in case there has been great loss of blood, as the buried animal suture is not readily absorbed where such depletion has occurred. (4) Extraperitoneal hematocele is usually self-limiting and will almost always result in the death of the fetus and the recovery of the patient. (5) In cases that go on to full term, operate at the end of pregnancy to save the child. Operate through the abdomen, drain through vagina and leave the placenta to come away by disintegration. (6) Electricity should be used only in cases so situated as to preclude the possibility of securing proper surgical treatment.

THE VALUE OF STERILISED MILK.

BARTON (*British Med. Journal;* also quoted in *Phila. Polyclinic*). The author, in a careful investigation of the subject, arrives at the following conclusions: (1) Completely sterilised milk, if admin-

istered without any fresh milk, will undoubtedly, sooner or later, produce scurvy. (2) Milk that is raised to the boiling point, or better, to within two degrees of the boiling point, and maintained there from for five to ten minutes, is comparatively sterilised and will never produce scurvy, and is almost free from pathogenic organisms. (3) Completely sterilised milk, if administered at once in perfectly clean bottles, spoons or cups can be relied upon as being free from any pathogenic microörganisms. (4) The heating of milk alters very little, if at all, its nourishing qualities. (5) All kinds of sterilised milk, if free from added chemicals, can become foul as quickly, if not more quickly, than ordinary fresh milk. (6) All sterilised milk that is put into hermetically sealed vessels, and which can keep fresh in them for many days, will produce scurvy unless some fresh food is administered daily. (7) Milk that is boiled directly over a fire will undoubtedly cause constipation. If the milk be placed in a vessel containing water, and the water be brought to the boiling point, its antiscorbutic properties are not lost and it does not cause constipation.

THE OBSTETRICAL TREATMENT OF PUERPERAL ECLAMPSIA.

According to P. Drejer, (*St. Louis Clinique,*) the best treatment in puerperal eclampsia, both for mother and infant, is speedy delivery, whether labor has commenced or not. The best method of doing this is that which any medical man can employ, and for this and other reasons the author does not recommend Dührssen's plan (by incision), but prefers simple dilatation. Hegar's dilators are used in the first instance; then when the cervical canal will admit one finger the rest of the dilation is carried out manually and delivery is completed by the method of Braxton Hicks. The colpeurynter is not much used in Norway, for the marked variations in temperature are apt to interfere with caoutchouc dilators. Bimanual compression is applied to the uterus for about one hour after the removal of the placenta, and so hemorrhage is prevented. Drejer gives details of three cases in which this method was employed.

INTEREST IN PLASTIC SURGERY.

Joseph Price (*Va. Med. Monthly*) says: "It is to be regretted that there is not a stronger interest in plastic surgery. If the profession would take the same interest, devote the equivalent in time, manifest the same enthusiasm in the practical study of plastic surgery they do to intraperitoneal disturbances, the result would be the

relief of many sufferers, the saving of many mothers from permanent invalidism. No man can be a good abdominal and pelvic surgeon without a thorough knowledge of obstetrical science and without a bedside experience in the practice of its art; and few men give that study to practical obstetrics which enables them to do good plastic surgery.

"It is important, in fact absolutely essential, to be thoroughly familiar with the female pelvis and maternal soft parts before, during and after childbirth. There must be a careful study of the female perineum to enable the surgeon to restore to normal relations structures injured in childbirth. Throughout labor it is important to study the normal perineum; immediately after labor, by inspection and by digital examination, to determine the precise nature and extent of injuries, if any, resulting from the delivery. It is then you can determine all injuries of pelvic fascia and muscle, even those of the levator ani. You can also become informed of certain deep mutilations, due to the premature application of forceps. The injudicious and indiscriminate use of obstetrical forceps has for a long time been responsible for distressing and not easily repaired injuries of the pelvic floor. Those familiar with practical obstetrics rarely use obstetrical forceps—only in about 2 to 4 per cent., even in consulting work. As the obstetrician's experience broadens, as his work increases, his use for forceps diminishes, so does his infantile mortality. The schools are largely responsible for the too frequent use and abuse of forceps. The real character and extent of uncomfortable conditions, sequelæ of injuries to the pelvic floor, uterine decensus, posterior displacements, cysts and rectocele are scarcely recognised by many engaged in obstetrical practice.

"Primarily, I have but little patience with a certain large class of so-called operators who think they can do a perfect operation if they possess a pair of scissors and needle and a noisy needle-holder. I rejoice that all wrangling has ceased over one, two or three stitch methods of operation, so commonly practised a few years ago. The study of all the injuries should be prosecuted in a large dispensary service, where the injuries are studied carefully, repaired carefully and watched after the operations. A good number of such patients return to the dispensary for a physician to attend them in their approaching confinement. Here, again, he has an opportunity to study the repaired perineum, its tolerance to a perfect test of operations practised, also the nature of recurring tears."

PRURITUS OF THE VULVA.

After as far as possible eliminating the cause, Dr. Morain (*N. Y. Med. Jour.*) orders vulvar lotions to be used night and morning of very hot water, to which 1 per cent. of chloral, coal tar or aromatic vinegar has been added. In addition to this, the affected region should be painted with the following solution :

℞	Cocain. hydroch.	gr. xv
	Aq. dest.	gr. 150

Dr. Morain also makes use of the following ointments :

℞	Menthol	gr. 45
	Olive oil	gr. xv
	Lanolin	gr. 90

℞	Potass bromide,	
	Salicylic acid	aa. gr. xv
	Glycerole of starch	gr. 300
	Calomel	gr. vj
	Ext. belladon.	gr. iij

He also recommends the following solution, which is to be used as a lotion :

℞	Mercury bichloride	gr. xxx
	Alcohol	gr. 150
	Rose water	gr. 600
	Aq. dest	℥xiv

If these remedies fail, says Dr. Morain, electricity, either the continued or the interrupted current, should be tried. In particularly rebellious cases, when the itching resists all kinds of treatment, resection of the tissues of the affected parts should be resorted to.

ANTE-OPERATIVE EXAMINATION OF URINE.

Dr. L. S. McMurtry, Louisville, (*Am. Jour. Surg. and Gynec.*,) says that a systematic examination of the urine of all women who come to the surgeon for operation will show pus in the urine in a very large proportion of cases. This should not deceive the operator —it may be due to leucorrhea, to gonorrhea and the like, or be purely transient, disappearing as soon as the operation has been performed. Unless there be quite a large amount of pus, it is, therefore, not necessary to spend useless time and energy in seeking a remote cause, provided a possible source of the discharge is present.

Selection.

STREET NOISES.

DOES the average practitioner ever think of or take into account the various noises that obtain in a large and thickly inhabited community to the general detriment of the ill and nervous ?

Many among healthy individuals, of course, become so accustomed to street noises that they excite no comment and hence do not in the least constitute a disturbance ; and yet these same individuals stretched upon a sick bed may become very sensitive thereto. In the stone-paved streets of the cities of Great Britain it is not uncommon to see straw distributed with lavish hand for a block or more, with no other purpose in view than deadening the sound of passing wheeled vehicles that might otherwise disturb the rest of some invalid : but in the United States such an act would probably bring down the anathemas of the neighborhood, perhaps even to "getting one into trouble with the police."

Where electric cars are continually passing, with the constant rattle of the gong as manipulated by the motorman, the jangling of the bell that conveys the signals of the conductor, coupled with the pounding of the wheels upon the rail and hissing of the trolley upon the wire, these, singly and collectively, constitute one of the most exasperating of the worries of the afflicted, particularly in summer, when the windows are perforce left open to secure the desired amount of fresh air and coolness. Think of the invalid subjected to this once every five to seven minutes !

Then there are the street cries : and thrice daily the screeching of the whistles and jangling of great bells ; the crash of rapidly moving fire engines ; the howling blasts of railroad engines and of boats—all tending to make a pandemonium that oftentimes is all but unbearable to one already half-demented as the result of high temperature and burning fever.

Is it not fully time that some of these barbarisms were done away with ? The street cars, of course, cannot be governed any more than can the rattling obtaining to the movements of fire engines and vehicles—at least not until there is a radical change in the arrangement of wheels, and perhaps in rails and pavements as well. Some cities have already set a good example in attempts to suppress these nuisances. Indianapolis, for instance, has forbidden the blowing of whistles and horns within the city limits.

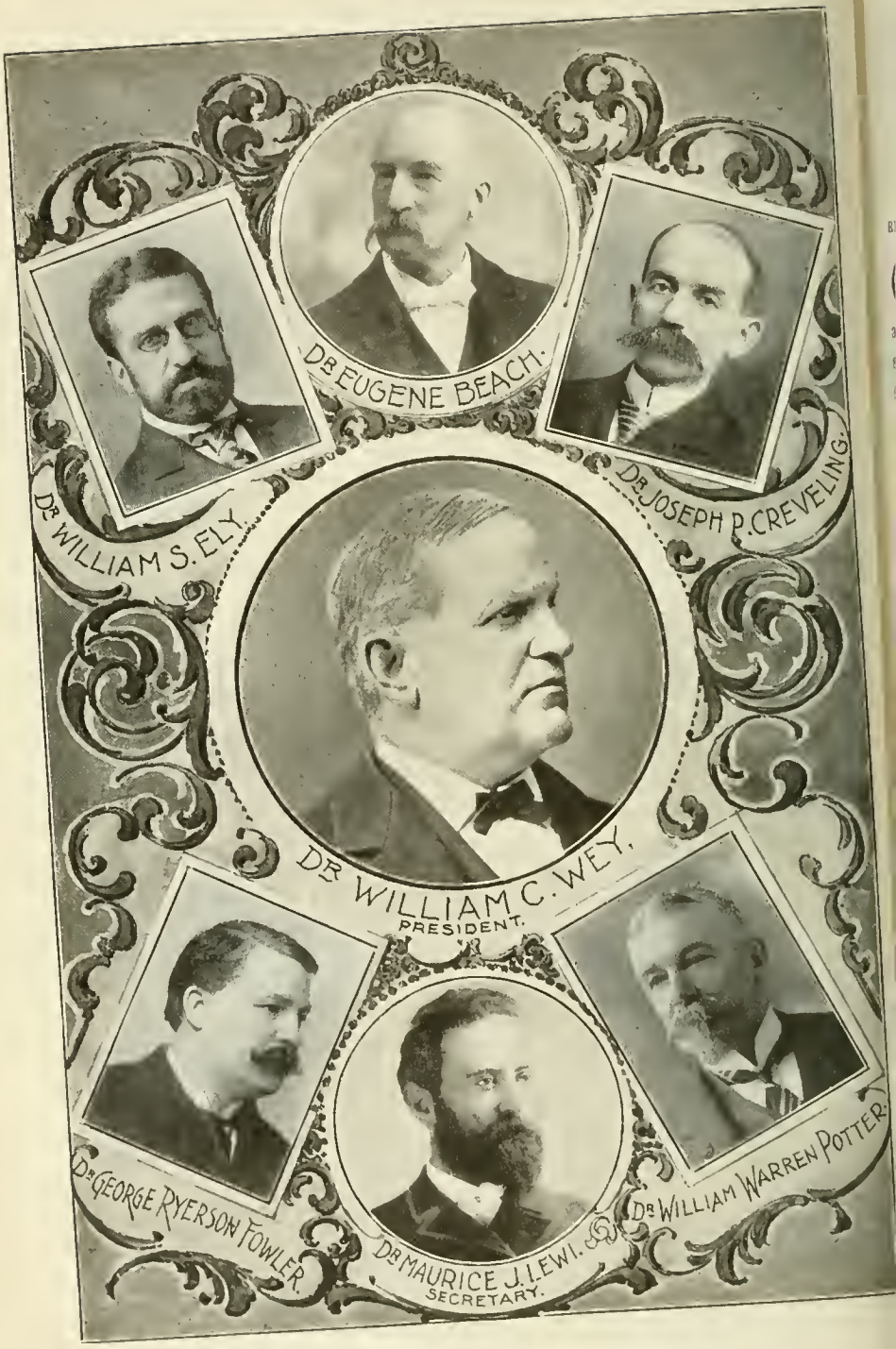
Proper municipal reform will embrace not only the foregoing,

but lead to suppression of all ringing of bells in church steeples and upon engines, all blowing of whistles as regards factories, steamers and locomotives. The church bell is a medieval relic that does not in the least tend to inculcate Divine precepts—rather the contrary! It might be tolerated if there was any good reason therefor, or even if there was any unison or suggestion of harmony; but instead noise and evidence of money expended alone seems to be the ends in view. The church-goer certainly does not depend upon iron tongues and brazen throats to inform him of the hours of service. Neither does the factory-hand require a whistle to call him or her to their duties—the check window and timekeeper are far more effective. Are there, then, any cogent reasons why both these nuisances should not be forever suppressed, not only in the interests of the ill, but as a means of ensuring rest and comfort to the community at large?

Again, the railway whistle might easily be replaced by a bit of the block system of rail, which would convey the desired information to the watchman at the crossing, or to the agent, by electricity. So, too, the locomotive bell in the same way might be replaced by electric gongs fixed at each and every crossing.

Surely there is no excuse in these days of flag-signals, telephones and telegraphy, for the prolonged sounding of whistles by steamers, the sole purpose of which is to inform owners that their property is passing—a bit of information that could better be conveyed by the marine reporter through telephone or over wire, and that, moreover, is almost invariably chronicled in the morning and evening papers; neither is the prolonged three blasts that heralds the approach to a wharf at all essential. Let these things be positively forbidden except in cases of fog or to signal approaching craft to designate the course to be steered. As already remarked, the majority of these nuisances arise from the desire to make a noise; and it is solely for this reason that every newly-built house of worship in a small community attempts to secure a larger and louder bell than its neighbors. These noises in the large cities on some days, or on parts of days, are almost continuous.

Truly this is a matter it behooves medical men to look after and bring before the municipal authorities of every large community with a view of permanently suppressing, or at least in a great measure mitigating. The regulation of whistling by steamers on large waterways, however, may perhaps require the consent and legislation of the national government, but even that, considering the object to be gained, should be far from a Herculean task.—*Medical Age.*



First State Medical Examining Board.

Special Article.

FIRST MEDICAL EXAMINING BOARD.

REPRESENTING THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

ON the 5th day of June, 1890, the governor approved the act of the legislature creating three separate medical examining and licensing boards—one to represent the medical society of the state of New York, one to represent the homeopathic medical society of the state of New York, and one to represent the electic medical society of the state of New York. It was provided that the law should take effect September 1, 1891, and that prior thereto these several state medical societies should each nominate fourteen or more members to the regents of the University of the state of New York, from which number the regents were to appoint three state boards of examiners, each to consist of seven members.

On March 11, 1891, the regents appointed to represent the medical society of the state of New York the following-named examiners: For three years, Dr. William Warren Potter, of Buffalo, Dr. William S. Ely, of Rochester, and Dr. Maurice J. Lewi, of Albany; for two years, Dr. William C. Wey, of Elmira, and Dr. George Ryerson Fowler, of Brooklyn; for one year, Dr. Eugene Beach, of Gloversville, and Dr. Joseph P. Creveling, of Auburn. Since his appointment Dr. Lewi has removed to New York. These appointees met at Albany, September 1, 1891, and organised as a board of medical examiners by electing Dr. William C. Wey, president, and Dr. Maurice J. Lewi, secretary.

These examiners have been reappointed to fill their own vacancies whenever they occurred by expiration of terms, and the officers have been reëlected each year, so that the organisation has been one and the same from the beginning until the death of Dr. Wey, which occurred June 30, 1897. The regents have lately appointed Dr. A. Walter Suiter, of Herkimer, to be a member of the board vice William C. Wey, deceased. A group portrait of the board as first constituted is herewith presented and the following brief biographical sketches are appended, in the belief that the interest in the subject of improved medical education is sufficient to justify a record in accessible form that may be preserved and

referred to, of some of those who have been especially instrumental in establishing the present system of separate state examination for license to practise medicine.

William C. Wey was born at Catskill, January 12, 1829. After obtaining his preliminary education he became a pupil of Dr. Alden March and took his doctorate degree from the Albany medical college, January 23, 1849. He then located at Elmira and was its first health officer after it became a city, to which office he was again appointed in 1894. He was a member of the board of education for six years and a manager of the state reformatory over twenty-two years, having been appointed March 5, 1875. For a number of years he was one of the managers of the state inebriate asylum at Binghamton. He was a manager and senior consultant of the Arnot-Ogden memorial hospital; a member of the Elmira academy of medicine, of the medical society of the county of Chemung and of the medical society of the state of New York, of all of which he had been president. He was chairman of the special committee on revision of the code of ethics of the medical society of the state of New York. He was appointed a member of the state medical examining and licensing board March 11, 1891, and was elected president at its first meeting, September 1, 1891. He was also examiner in physiology and hygiene, serving in this capacity as well as president from the organisation of the board until his death, which occurred at Elmira, where he had continued to reside for forty-eight years, on June 30, 1897.

William S. Ely was born at Rochester in 1841, received his preliminary education in that city and took his degree in arts at the university of Rochester in 1861. He began the study of medicine immediately and during the civil war served as assistant surgeon 108th regiment N. Y. Vols. from August 13, 1862, to September 2, 1863, when he was commissioned assistant surgeon U. S. Vols. He was promoted to be surgeon U. S. Vols., January 20, 1865. He was mustered out at his own request October 6, 1865, and was breveted lieutenant-colonel U. S. Vols., for faithful and meritorious service. He received his doctorate degree from the college of physicians and surgeons at New York in 1867, since which time he has practised his profession in his native city. He was appointed attending physician to the Rochester city hospital, in 1868, and still continues in that service. He is a member of the Rochester medical society, of the medical society of the county of Monroe, of the medical association of central New York, of the medical society of the state of New York, of all of which he has been president. He was a member of the special committee on revision of the code of ethics of the medical society of the state of New York, his colleagues being Drs. Wey, Agnew,

Vander Poel and Piffard. He was appointed by the regents, March 11, 1891, to be a member of the state medical examining board and was reappointed in 1894 and 1897. He is, and has been from the first, examiner in anatomy.

EUGENE BEACH was born at Greenville, Greene county, N. Y., November 6, 1838. He obtained his preliminary education in the state normal school at Albany, from which he graduated in 1856. He received his doctorate degree from the Long Island college hospital, Brooklyn, in June, 1866, and soon afterward began the practice of his profession at Gloversville, which he has continued until the present time. He is a member of the medical society of the county of Fulton and of the medical society of the state of New York and is attending physician to the Nathan Littauer hospital at Gloversville. He was appointed by the regents, March 11, 1891, to be a member of the state medical examining board and was reappointed in 1892 and 1895. He became at the outset, and still continues in that position, examiner in the practice of medicine, materia medica and therapeutics.

GEORGE RYERSON FOWLER was born in New York City, December 25, 1848, and graduated from Bellevue hospital medical college in February, 1871. He was one of the founders of the Brooklyn anatomical and surgical society in 1878, and was associate editor of the *Annals* of this society, now the *Annals of Surgery*. In 1883 he was appointed surgeon-in-chief to the department of fractures and dislocations at St. Mary's hospital, Brooklyn, and subsequently had entire charge of the general surgery of that hospital. He has been surgeon to the Methodist Episcopal hospital since its opening in 1887. He was president of the medical society of the county of Kings in 1886; in 1891 was elected a fellow of the American surgical association, and in 1892 a member of the New York surgical society. He is a member of the New York academy of medicine; one of the founders of the Brooklyn surgical society and its president in 1891, and a permanent member of the medical society of the state of New York.

In 1895 he was appointed to service at the Brooklyn hospital, of which he is now surgeon-in-chief. He is the author of a treatise on Appendicitis and of many surgical monographs.

Dr. Fowler was appointed by the regents, on March 11, 1891, a member of the state medical examining board, was reappointed in 1893 and 1896, and has been from the first and is now examiner in surgery. He is also a member of the question committee.

JOSEPH P. CREVELING was born at Bethlehem, N. J., May 2, 1848. After receiving his preliminary education he pursued the study of medicine and received his doctorate degree from the

University of Michigan in 1870. Later the honorary degree of master of arts was conferred upon him by Maryville college. He has practised the profession of medicine since 1872 at Auburn. He is a member of the medical society of the county of Cayuga, of the medical association of central New York, and of the medical society of the state of New York. He is attending surgeon at the Auburn city hospital, and has held several other places of honor and trust. March 11, 1891, he was appointed by the regents a member of the state medical examining board, and upon its organisation was assigned to the department of pathology, which he has continued to hold from the first. He was reappointed in 1892 and 1895.

Maurice J. Lewi, son of Dr. Joseph Lewi, was born at Albany, N. Y., December 1, 1857. After graduating from the Albany free academy (high school) and taking a private Cornell course with the late Professor Altmayer, he entered the Albany medical college, graduating in 1877. After serving as house physician at the Albany hospital he went to Europe for study and returning to Albany he commenced the general practice of medicine. He was appointed lecturer at the Albany medical college on diseases of women and children, in which position he continued for two years and in 1885 he became professor of medical jurisprudence at the Albany law school. He was president of the Albany county medical society, the Albany academy of medicine and the union medical association. He removed to New York City in 1892. He was appointed medical director of the American Union Life Insurance Company in 1895, which position he still occupies.

Dr. Lewi is a member of the society of medical jurisprudence, the medical society of the county of New York, the New York academy of medicine and the medical society of the state of New York. Dr. Lewi was appointed by the regents, March 11, 1891, a member of the state medical examining board and was reappointed in 1894 and 1897. He has been secretary of the board, examiner in chemistry and a member of the question committee from the first.

William Warren Potter was born at Strykersville, N. Y., December 31, 1838, obtained his preliminary education at Arcade seminary and Genesee seminary and college, Lima, N. Y., and graduated from the Buffalo university medical college in 1859. After two years of general practice he was commissioned assistant surgeon of the 49th regiment N. Y. Vols. (Col. D. D. Bidwell commanding), and in December, 1862, was promoted surgeon of the 57th regiment N. Y. Vols. In 1863, he was assigned as surgeon-in-chief of the first division hospital second army corps, and upon muster out of service at the close of the war was breveted lieutenant-colonel of U. S. Vols. (date March 3, 1865), for faithful

and meritorious service. He is a permanent member of the medical society of the state of New York, president in 1891; member of the medical society of the county of Erie, president in 1893; was president of the Buffalo medical and surgical association in 1886; was president of the Buffalo obstetrical society, 1884-86; secretary of the American association of obstetricians and gynecologists since 1888; president of the section of gynecology and abdominal surgery of the first Pan-American medical congress, in 1893; president of the national confederation of state medical examining and licensing boards, 1895–'98; consulting gynecologist at the woman's hospital, Buffalo; and a companion of the military order of the loyal legion of the United States.

Dr. Potter was appointed a member of the state medical examining board by the regents March 11, 1891, and was reappointed in 1894 and again in 1897. He has been examiner in obstetrics from the organisation of the board until the present time.

Examinations have been held by the board as constituted in the foregoing paragraphs since the autumn of 1891, five times a year simultaneously in four cities—namely, New York, Albany, Syracuse and Buffalo. The board makes an annual report of its work to the medical society of the state of New York, and detailed reports of each examination are made to the regents. These latter are very elaborate tables, showing the percentages in standing of each candidate in each branch and his aggregate standing as a whole. These statistics involve an extraordinary amount of labor in their preparation, since they must be made up with the utmost care. This work devolves upon the secretary, whose office of necessity is a busy one. Under the stimulating influence of the state examination medical colleges have advanced their standards and lengthened their periods of instruction until, beginning with 1898, candidates for the state license must present a diploma from a schoolr equiring four years of collegiate training and evidence of a preliminary education equal to that of a New York high school graduate.

The medical profession of the state of New York has occasion to feel justly proud of its standards of medical education as at present existing.

William Warren Potter

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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A YEAR OF MEDICINE IN BUFFALO.

THE year 1897 having just terminated, a résumé of medical affairs would seem appropriate. Such reviews have historic interest, serving to group within a single article such data of interest as may come within the purview of the historian of the future.

With the advent of the year came the new appointments in the health department. Mayor Jewett reappointed Dr. Ernest Wende as health commissioner for a term of five years, to succeed himself. Dr. Wende appointed as deputy commissioner Dr. Walter D. Greene, a prominent physician, also for the term of five years. Dr. John A. Pettit retired as deputy health commissioner after five years of honored service, on account of the pressing demands of his practice. Dr. Pettit has been a prominent practitioner in Buffalo for 25 years, and is justly regarded as one of our most successful and accomplished physicians. The work of the health department for the year has been characterised by the same energy, vigilance and skilful application of sanitary science that has heretofore distinguished it under the present commissioner and the death-rate of Buffalo continues to be the lowest in the world among cities of its class.

The medical societies pursued their work on the usual lines and with reasonably progressive results. The Medical Society of the County of Erie held its customary two meetings during the year. The annual meeting, held January 12, 1897, was presided over by the retiring president, Dr. J. G. Thompson, of Angola. The following physicians were admitted to membership: Drs. Jane N. Frear, Frederick W. Hayes, Edward E. Koehler, Earl P. Lothrop, E. T. Rulison, A. E. Woehnert, Marion Marsh, Cora Billings Lattin and Henry W. Lattin. Dr. F. W. Hinckel read a paper on Earache,

its significance and management, that has been extensively copied or abstracted by the medical journals throughout the country. Dr. P. W. Van Peyma read a paper on the Albuminuria of pregnancy and Dr. T. B. Carpenter one on Genito-urinary epithelium. At the semi-annual meeting, held June 8, 1897, Dr. Lucien Howe presided, having been elected president, vice Dr. H. R. Hopkins, declined. Dr. J. B. Coakley was elected vice-president, vice Dr. H. P. Trull, declined. Dr. J. Glen Ernest was elected to membership. Dr. William C. Krauss read a paper entitled Some facts regarding brain anatomy and brain tumors, and Drs. Frederick Preiss and R. R. Ross led in a discussion on the Application of the X-ray in medicine and surgery.

The Buffalo Academy of Medicine held its regular meetings, and some of the sections presented programs of unusual interest. The invitees from other cities to read papers, with the dates thereof, were as follows: Tuesday, January 12th, Dr. T. M. T. Finney, associate professor of surgery Johns Hopkins University Medical College, Baltimore, before the section on surgery— subject, Surgical treatment of perforating typhoid ulcer. February 2d, Dr. William B. Coley, surgeon to the Hospital for Ruptured and Crippled, New York, before the section on surgery—subject, Results of 350 operative cases of inguinal hernia in the male. Dr. William T. Councilman, professor of pathology in the Harvard Medical School, read a paper before the section on pathology, March 16th, entitled Acute diffuse nephritis, with special reference to the glomerula changes. Professor Charles Wright Dodge, of Rochester University, spoke before the section on pathology, April 20th, on the Recent progress in cellular biology, illustrated with the calcium light. Professor Burt G. Wilder, of Cornell University, delivered a lecture, May 18th, before the section on pathology on the Brain of a suicide, with fissural peculiarities. Dr. R. H. Harte, of Philadelphia, lectured to the section on surgery, June 29th—subject, Some observations on the radical cure of hernia. Dr. William H. Bergtold, professor of pathology in the University of Denver, Colorado, read a paper, September 28th, before the section on medicine, entitled Tuberculosis. Miss Mary Forster, Nawnham College, Eng., read before the section on pathology, September 21st—subject, Abnormal cell development in plants and animals: a study in comparative pathology. Dr. E. H. Bradford, surgeon to the Children's Hospital, Boston, spoke before the section on surgery, Thursday, November 4th—subject, Congenital dislocations of the hip, illus

trated by lantern slides. Dr. John H. Musser, professor of clinical medicine University of Pennsylvania, lectured to the section of medicine, November 9th—subject, Renal calculus. Dr. William T. Corlett, professor of dermatology and syphilology Western Reserve University, Cleveland, spoke before the section on pathology, Tuesday, November 16th—subject, Recent researches in the pathology of trichophytosis, illustrated by stereopticon. The officers of the Academy, elected at the annual meeting in June, for 1897–98 are: President, Dr. Lucien Howe; secretary, Dr. Thomas F. Dwyer; treasurer, Dr. E. A. Smith; trustees, Dr. M. Hartwig, three years; Dr. Delancey Rochester, two years; and Dr. H. R. Hopkins, one year. The vice-presidents are the chairmen of the several sections. Section on medicine, chairman, Dr. Delancey Rochester; secretary, Dr. William G. Ring. Section on surgery, chairman, Dr. Chauncey P. Smith; secretary, Dr. A. E. Diehl. Section on obstetrics and gynecology, chairman, Dr. Charles Congdon; secretary, Dr. C. J. Reynolds. Section on pathology, chairman, Dr. F. J. Thornbury; secretary, Dr. J. C. Clemesha. The council consists of the foregoing officers and Dr. Herman Mynter, the president of the previous year.

The private medical societies have enjoyed a prosperous year, and many of them have done excellent work. The list is as follows: The Medical Club, the Medical Union, the Roswell Park Medical Club and the Buffalo Microscopical Society.

The American Institute of Homeopathy held its annual meeting at Buffalo, June 23–30, 1897. Dr. A. R. Wright, who acted as chairman of the local committee of arrangements, was elected president for the current year. The next meeting will be held at Omaha, Neb.

The Medical Association of Central New York held its annual meeting in this city, October 18, 1897, at the Ellicott Club, under the presidency of Dr. Edward B. Angell, of Rochester. A number of important papers were read and the medical expert question was discussed in a series of papers from both medical and legal standpoints. Mr. Tracy C. Becker, of Buffalo, presented an elaborate argument from the viewpoint of the bar. In this issue the JOURNAL publishes a paper by Dr. A. W. Henckell, of Rochester, which opened the discussion. All the papers read at the meeting, after publication in the JOURNAL, will appear in separate bookform.

The fifty-first annual commencement of Buffalo University Medical College was held April 27, 1897, when seventy diplomas

were granted in medicine, forty-six in pharmacy and sixty-eight in dentistry, the largest number issued in any year. At the alumni association meeting Dr. P. W. Van Peyma, of Buffalo, presided, and, *inter alia*, Dr. Alfred Stengel, of Philadelphia, read an elaborate paper on the Anatomy and pathology of the red blood corpuscle. At the exercises held in the evening at Music Hall, Prof. Joseph P. Remington, of Philadelphia, addressed the graduating classes. The annual banquet was afterward held at the Ellicott Club.

The twelfth annual commencement of Niagara University Medical College was held May 12, 1897, at which ten diplomas were conferred. Dr. F. W. Maloney, of Rochester, presided at the meeting of the alumni association and also read a paper on the Importance of insurance medicine. Drs. Bayliss, Daggett and Dowd, of Buffalo, also read papers. At the evening exercises, Dr. John Cronyn acted as master of ceremonies and Dr. John A. Miller, Rev. Frank S. Fitch, of Buffalo, and the Rev. Father McHale, of Niagara Falls, delivered addresses. The customary banquet was served at the Genesee Hotel.

The Buffalo Sanatory Club was organised in February for the purpose of acquiring and disseminating knowledge relating to the preservation of health among the people. It aims to induce editors, reporters, microscopists, architects, builders, plumbers, heaters, men, women and doctors to join in the study and work aforementioned. It holds six meetings a year, at each one of which is discussed some topic relating to public health and prevention of disease.

The books of the year are: Appendicitis and its Surgical Treatment, by Dr. Herman Mynter, and an Epitomé of the History of Medicine, by Dr. Roswell Park. Dr. Mynter's treatise has been favorably received by the profession and has been commended by the medical journals. It is a most satisfactory exposé of our present knowledge of appendicitis. Dr. Park's work is a grouping of lectures delivered at the University of Buffalo, and is a most instructive and readable volume.

The dead of the year in Buffalo and vicinity are as follows: Dr. John C. Lewis, Panama, Chautauqua county, February 6, 1897, aged 48 years; Dr. Alphonse Dagenais, of Buffalo, March 4, 1897, aged 50 years; Dr. James B. Samo, of Buffalo, March 13th, aged 85 years; Dr. Frederic W. Bartlett, of Buffalo, March 17th, aged 71 years; Dr. Gardner C. Clarke, of Niagara Falls, March 22d, aged 56 years; Dr. Samuel Potter, of Lancaster, June 12th,

aged 83 years; Dr. F. H. James, of Lancaster, June 28th, aged 72 years; Dr. Edward Storck, of Buffalo, July 26th, aged 66 years; Dr. Myron H. Mills, of Mount Morris, August 14th, aged about 70 years; Dr. Walter J. Ransom, of Lockport, August 20th, aged about 40 years; Dr. George W. Lewis, of Buffalo, August 30th, aged 70 years; Dr. Ravel B. Parks, of Jamestown, November 17th, aged 48 years.

TOPICS OF THE TIME.

The necessity of drinking water in appropriate quantities is not appreciated by the majority of people. Its importance in the promotion of health and the prevention of disease is not even correctly estimated by some physicians. For this reason, it is well that such avenues as the *Ladies' Home Journal*, with its large circulation, permeating so many thousands of households, should be made available in the dissemination of knowledge on the subject. Mrs. S. T. Rorer, in the December number, discourses upon this most important subject in the following intelligent manner:

Water is really our only true beverage. Forming, as it does, three-quarters of the weight of the human body, it is of the next importance to the air we breathe. Milk is a typical food, not a beverage, and should never be used as such. It is true that it contains a large amount of water, but only sufficient for its digestion.

In a very short time the non-water-drinker becomes sallow, constipated and uncomfortable. The poison matter that should be dissolved by the free use of water and carried off in the circulation and through the excretory organs is held in the system; the body loses weight, the skin becomes dry and rough, losing its life and brilliancy. Three-quarters of the weight of the living body should be water. A large quantity of this water is taken in the form of green vegetables and fruits. A healthy person should drink at least a quart and a half of cool (not iced) water in each twenty-four hours—a glass the first thing in the morning and the last thing at night and the remaining quantity after or between meals. Infants frequently suffer more from the lack of cool water than from the lack of food.

The paper read by Hon. Wm. P. Letchworth before the national conference of charities and corrections, at Toronto last July, on Dependent children and family homes, contains much to interest those not directly engaged in philanthropic work. Mr. Letchworth's long experience as a state commissioner of charities has

shown him the great wrongs which dependent children suffer from being placed in unsuitable homes. These evils arise from indifference before placing them and inattention and neglect afterward. The remedy lies in legislation which will put the placing out of these unfortunate children under the supervision of the state board of charities.

The orphan asylum is no longer regarded as the permanent home for the dependent child, but rather as a temporary refuge and training-school for preparing the child for admittance into a desirable home ; and, further, it has an important work in preventing the breaking up of families, by providing shelter for the children during times of distress and bereavement. Mr. Letchworth notes that Buffalo has a smaller number of children in orphan asylums today, in proportion to its population, than it had twenty years ago.

THE PRESIDENT in his annual message to the congress paid especial attention to the importance of quarantine reform. The recent yellow fever epidemic at the South has directed public attention again to the inadequacy of the present system of quarantine by the states. It is a generally admitted fact that the epidemic referred to did not receive the skilful handling with reference to its prevention, not to speak of its eradication, that the public is entitled to expect in the present advanced state of the science of public sanitation.

Yellow fever is a disease that is practically unknown in Europe, and it is a disgrace to the United States that the end of the nineteenth century witnesses such an intimate acquaintance with it. We aim our criticisms at no one in particular and without disparagement to the noble efforts made in most regions of the South to stay the recent plague, but only desire to call attention to the general fact that our present methods are inefficient, unscientific, if not disgraceful.

The surgeon-general of the army, Dr. George M. Sternberg, and the secretary of the treasury, Mr. Gage, are at one in recommending a national system of quarantine. The president lends his powerful hand at pulling the oars in that direction, and if we do not speedily extricate ourselves from this dilemma it will not be difficult to demonstrate that it will be entirely the fault of the congress.

The president also adds the recommendation that a systematic investigation of the obscure and hitherto undetermined cause of yellow fever should be made by a commission of four expert bacte-

riologists appointed by the president from the medical departments of the army and navy, the marine hospital service and civil life. It would cost only a trifling sum to carry out this suggestion, and the results might be of advantage to the whole world.

WILLIS S. ANDERSON, of Detroit, has recently published in the *Physician and Surgeon* an article entitled, A study of crime and degenerates from a medical standpoint, in which he deduces strong arguments in favor of heredity as related to the social condition of mankind. In the course of his dissertation he cites the following in support of this theory:

The Jukes family, as studied by Dugdale, is an excellent illustration of the influence of heredity. From the head of the family, Max Jukes, a great drunkard, descended, in seventy-five years, 200 thieves and murderers, 280 invalids, attacked by blindness, idiocy or consumption, 90 prostitutes and 300 children who died prematurely. Out of 709 descendants, carefully studied, but few were honest. Of the men not more than twenty were skilled workmen, and ten of these learned their trade in prison.

CHRISTIAN science healers and faith curists are beginning to understand that the law must be respected, even if decency is ignored. A coroner's jury at Camden, N. J., on Saturday, December 18th, held two faith curists responsible for the death of a little two-year-old, Sarah Clare Kirby. She died last week under the treatment of her father, Frank Kirby, and a Philadelphia disciple, W. F. Randall. The prayers of these were unavailing, and after the authorities took charge and found another child ill from the same disease Kirby fought against the entrance of a physician to the house. Coroner Lippincott conducted the inquest. Kirby declared that at the birth of the last child he treated his wife by faith cure with success. The birth of the child was certified to by a physician who was called when it was all over, but Kirby would not allow the doctor to see his wife after that. He said he knew of other people being cured by Randall, who, he said, "charges a fee according to people's means." The child's life was insured, but Kirby did not know in whose favor.

The jury, after being out just long enough to frame a verdict, returned it as follows: "We find that Sarah Clare Kirby came to her death from diphtheria through the criminal negligence of her father, Frank Kirby, and we further find William F. Randall an accessory."

Coroner Lippincott committed Kirby in default of $500 bail. The next day he secured bondsmen and was released. The bondsmen were his father, Asa C. Kirby, also a faith curist, and William C. Kean. Randall has remained out of the state ever since the child died. He will be arrested in Philadelphia if he can be found. He will also be proceeded against for practising medicine contrary to the statute.

Another instance of the protective nature of the law against the ignorance of mankind is recorded in the *Western Medical Review* as follows: "Mrs. Baird, a christian science healer of Kansas City, was fined $50 on November 9th for failing to report to the board of health a case of diphtheria she was treating. The case was appealed. G. H. Kiney, the father of a little girl which had just died under Mrs. Baird's treatment, signed her appeal bond. The father and mother of a little girl who had died of diphtheria under christian science treatment were also arrested. They refuse to give the name of the christian (?) healer who attended their child."

Sir James Crichton-Browne spoke at Selkirk, November 8, 1897, making the subject of his discourse Longevity and the brain, during which, according to the *London Lancet*, he dwelt on the dangers to health involved in indolence and disuse of the brain. The medical profession, he said, adapting itself to the needs of the times, had felt it incumbent upon it during the last decade to insist mainly on the evils of misuse of the brain, on the excessive strain not seldom imposed on it in these days in the fierce struggle of the race to be rich, and more especially on the over-pressure imposed on it in the name of education when in an immature state, but they were not less keenly alive to the correlative evils of the disuse of the brain.

Elderly persons who gave up business and professional men who laid aside their avocations without having other interests or pursuits to which to turn were in many cases plunged into despondency or hurried into premature dotage. He did not know any surer way of inducing premature mental decay than for a man of active habits to retire and do nothing when just past the zenith of life; and, on the other hand, he did not know any surer way of enjoying a green old age than to keep on working at something till the close. It had been said that one of the rewards of philosophy was length of days, and a striking list might be presented of men distinguished

for their intellectual labors, which they had never laid aside, who had far exceeded the allotted span of human life. Galileo lived to seventy-eight, Newton to eighty-five, Franklin to eighty-five, Buffon to eighty, Faraday to seventy-six, and Brewster to eighty-four years. Sir James Crichton-Browne drew special attention to the great age generally attained by our judges.

In reporting the proceedings of the recent meeting of the Southern Surgical and Gynecological Association, the St. Louis *Globe-Democrat* prints the following interesting paragraph relating to the official stenographic reports of society meetings :

"One of the most interesting talkers of the meetings is Dr. William Whitford, of Chicago, but all his talking is done in the corridors before and after the sessions, as he is much too busy when the surgeons are in session to do anything but take the proceedings in shorthand. Dr. Whitford is the society's official stenographer. For twelve years his sole occupation has been the reporting of proceedings of medical societies. He probably occupies a field in which he has practically no competition, as fourteen societies engage his services almost constantly. He attended the college of medicine at Ann Arbor, Mich., in connection with the University of Michigan. Being a rapid shorthand writer, he was engaged during his college career to report medical lectures. This gave him a reputation which enabled him to spend his entire time at a calling in which the ordinary court reporter or shorthand writer would be lost. His greatest work is at the meetings of the American Medical Society. It has 9,000 members, and he is forced to employ eleven assistants. The longest discussion he ever 'took' was one lasting three hours on the subject of appendicitis, and 30,000 words were delivered. They were not the ordinary words which a shorthand man is used to taking, but words like staphylococcus, laparomyomectomy and cholecyst-enterost-omy came at the rate of 200 per minute—for the surgeons are fast talkers. Dr. Whitford was asked if he ever found a sentence which he could not 'take,' and was forced to admit that he had—it was before the American Association for the Advancement of Science, and the theme under discussion was the aurora borealis. The sentences which made Whitford stumble with his pencil, if his own statement is accepted, were : 'When the melofygistic temperature of the horizon is such as to calorcise the impurient indentation of the hemispheric analogy, the cohesion of the borax curbistus becomes surcharged with

infinitesimals which are thereby deprived of their fissaral disquisitions. This effected, a rapid change is produced in the thorambumpter of the gyasticutis paleorum. This causes a convacular in the hexagonal antipathies. The clouds become a mass of deodorised spreula of cermocular light, which can only be seen when it is visible.' "

If it is true that more needy persons have applied to the poor department for aid at this season of the year than usual, why is there not a fine opportunity for the municipality to set these men to work upon the streets and thus make them self-supporting? We have heretofore pointed out not only the propriety but the economy of such a course. If the poor and needy are given employment, they are not only enabled thus to earn their own living, but occupation so afforded is a powerful factor in the prevention of disease. Main street from the harbor to the crossing of Chippewa street should be cleared of snow as soon as it falls. The wide space cleared at the crossings and in the center by the street cars ruins the sleighing, hence it were much better to clear the entire street in the section we mention.

Personal.

Dr. Frederick J. Barrett, of Buffalo, U. of B. '97, has established his office and residence at 358 Breckenridge street. Hours, 8–10 a. m., 2–3 and 7 p. m.

Dr. D. J. Constantine, of Buffalo, has removed from 387 Fargo avenue to 528 West avenue. Hours: 8–9 a. m., 1–3 and 6–8 p. m. Telephone, Bryant 286.

Dr. W. S. Tremaine, of Buffalo, who has been reported in the newspapers as very ill, is now improving and his physicians encourage the hope of his early recovery.

Dr. John C. Fisher, formerly in charge of the Warsaw Sanitarium, more recently of Lytton Springs, Cal., has been appointed to the medical care of Gleason Sanitarium, Elmira. He assumed charge of the latter January 1, 1898.

Dr. Marie Louise Benoit, U. of B. '96, has been appointed by the state civil service commission to be medical interne to the Craig colony for epileptics at Sonyea, Livingston county, N. Y.

Dr. Roswell Park has sailed from Gibraltar and is expected to reach Buffalo in the early days of January. He is reported as very much improved in health and is expecting to assume his duties at the university, as well as the practice of surgery, very soon after his return.

Dr. A. H. Freeland Barbour and Mrs. Barbour, of Edinburgh, during their recent visit to the United States spent a day in Buffalo. They were much pleased with our interesting and handsome city and promised to visit it again in the not distant future in the hope of making a longer sojourn. Dr. and Mrs. Barbour have visited the United States before, hence are familiar with the methods and habits of life here as well as of travel and know how to take advantage of the best opportunities for comfort and pleasure.

Dr. Harold N. Moyer, of Chicago, (*Western Medical Review*,) editor of *Medicine*, was shot by footpads at about 7 o'clock p. m., December 9, 1897. He was walking up the street, and noticing that he was being followed increased his pace. The would-be robbers, however, quickened theirs too, and finding it was either run or fight the doctor suddenly turned around and struck one between the eyes, felling him. The other shot at the doctor, but the latter struck the arm of the assailant and the bullet entered the fleshy part of the thigh. Others coming up, the robbers fled, and Dr. Moyer was taken to the Presbyterian Hospital, where Dr. Stamen removed the bullet. Dr. Moyer is doing well.

Dr. W. H. Sanders, our efficient state health officer, (*Ala. Med. and Surg. Age*,) has during the past three months been faithful in the discharge of his duties as the guardian of the public health. Regardless of the danger to his own life he has faced this responsibility, and the wise and conservative methods adopted by him have been the cause of saving many lives and a great saving of property to the people of the state. He deserves the endorsement of the medical profession and all the people of the state of Alabama.

We presume the foregoing paragraph refers to the action of Dr. Sanders in maintaining an efficient quarantine against yellow fever during the recent epidemic. We desire to add our congratulations to the state of Alabama in having such an able and efficient health officer as Dr. Sanders.

Society Meetings.

The Roswell Park Medical Club, at its November meeting, was entertained with two papers by Dr. Irving M. Snow, one entitled Certified milk in Buffalo, and the other Insolation in babies.

The Elmira Academy of Medicine held its regular meeting Wednesday evening, December 1, 1897, under the presidency of Dr. Frank W. Ross. Prof. Veranus A. Moore, professor of comparative pathology and bacteriology at the New York State Veterinary College, Cornell University, delivered a lecture on The nature and prevention of anthrax, with special reference to a recent outbreak near Elmira, N. Y., with specimens, cultures and virus.

The Buffalo Sanatory Club will hold a meeting the third Thursday in January, when it will discuss the subject of disinfection. The discussion will be subdivided as follows: general disinfection, by Dr. Thomas B. Carpenter; chemistry of disinfection, by Prof. John A. Miller; bacteriological disinfection, by Dr. H. U. Williams or Dr. H. G. Matzinger; legal rights of property owners in regard to placards, disinfection of houses and the like, by Leroy Parker, Esq.

The Medical Society of the County of Chautauqua held its semi-annual meeting at Jamestown, December 14, 1897, under the presidency of Dr. Morris N. Bemus. The following-named physicians were elected to membership: Drs. Mary Armstrong Jones and J. J. Mahoney, of Jamestown, and Drs. G. E. Smith snd Thomas E. Soules, of Cherry Creek. The scientific session was devoted to a discussion of acute peritonitis. In the evening Hon. F. W. Stephens addressed the society upon the subject of Expert evidence from a lawyer's viewpoint, after which a dinner was served, at which twenty-eight covers were laid.

THE Medico-legal Society of New York held its annual meeting at the Hotel Marlborough, Wednesday, December 15th, at 6.30 P. M. Dinner was served at that hour, and the regular order of business was taken up at 9 o'clock as follows: (1) Gas poisoning. The paper of Prof. W. B. McVey on this subject and Prof. C. A. Doremus was further discussed by Prof. M. C. White, M. D., of Yale University; Prof. Geo. B. Miller, M. D., chemist of society, of Philadelphia, and others who were invited to speak on the subject. (2) Paper by Prof. William J. Herdman, M. D., LL. D., of the University of Michigan, on Alleged traumatic neurasthenia. (3) Paper by Prof. Thomas Fassett Keyes, M. D., of Chicago, on Criminality and degeneracy. (4) Annual reports of the officers—treasurer, bacteriologist, chemist, microscopist, pathologist and toxicologist. (5) Annual reports of the sections of the society. (6) Report of the tellers on annual election of officers.

THE Buffalo Academy of Medicine held meetings during the month of December, 1897, as follows:

Section on Surgery.—Tuesday evening, December 7th, indefinitely postponed until further notice on account of illness of essayists.

Section on Medicine.—Tuesday evening, December 14th, program: Clinical report, Lavage of stomach, followed by peripheral neuritis (including optic neuritis) and a peculiar edema, by Dr. J. C. Clemesha. Discussion opened by Dr. Allen A. Jones. The Jew in medicine, by Dr. Julius Ullman.

Section on Pathology.—Tuesday evening, December 21st, program: Report of two cases of scurvy, giving account of blood examination, by Dr. A. L. Benedict. The bacillus icteroides (yellow fever); History of its discovery, report of personal observations as to biological and other characters, and exhibition of cultures and preparations, by Drs. Frank J. Thornbury and Maj. A. Herst Appel, U. S. A. Exhibition of specimens, by Dr. Marcell Hartwig and Dr. A. L. Benedict. Trichinosis equi, first recorded case; presentation of microscopical slides and photographs, by Dr. F. J. Thornbury.

Section on Obstetrics and Gynecology.—Tuesday evening, December 28th, program: Appendicitis in its relation to obstetrics, by Dr. Eugene A. Smith.

THE Medical Society of the County of Erie will hold its seventy-seventh annual meeting Tuesday, January 11, 1898, at Palace Arcade, observing the following program :

9.30 A. M. Business. President's annual address, Dr. Lucien Howe, Buffalo. Election of officers. Scientific contributions : Colle's fracture, Dr. J. G. Thompson, Angola ; Infant mortality, Dr. F. C. Gram, Buffalo ; reports of interesting cases.

12.30 P. M. Recess. X-ray examinations, Dr. Frederick Preiss, Buffalo. During recess Dr. Preiss will give opportunity for the examination with the X-rays of any cases presented by members of the society. As time will be limited, any member desiring to present a case for examination will please communicate with Dr. Preiss in advance of the meeting.

2.30 P. M. Some diarrheal diseases of children, Dr. F. H. Stanbro, Springville ; Formaldehyde disinfection, Dr. W. G. Bissell, Buffalo, bacteriologist to the health department ; discussion by Drs. H. R. Hopkins, W. D. Greene, G. W. York and Jno. A. Miller.

3.30 P. M. Discussion on milk : Modified milk for infant feeding, G. E. Gordon, Esq., of Boston, Mass. ; followed by Drs. Irving M. Snow, Eugene Smith, Edward Clark, Ernest Wende, Dewitt Sherman and H. M. Hill. Reports of cases.

Members are invited to present brief reports of any cases of special interest observed in their practice.

Medical College and Hospital Notes.

THE Woman's Hospital, which has been for more than forty years a landmark in old New York, occupying the conspicuous block at Park avenue and 49th street, has at last decided to move. The block between 49th and 50th streets and Park avenue, on which the Woman's Hospital stands, therefore, comes upon the market. The directors hope, as soon as their financial arrangements are completed, to erect more modern buildings on the new site in Eighth avenue, facing the park, and to be enabled to accommodate a great many more patients.

This institution was the pioneer in its special branch of beneficent surgery. It has done incalculable good to the city, and, with enlarged facilities, may be expected to remain in the front rank among the benevolent institutions of which New York is most proud.

The sons of the late Henry W. Sage have presented the residence of the great philanthropist together with an endowment fund of $100,000 to Cornell University for hospital purposes. This latest gift, says the *Mail and Express*, which provides a splendid infirmary for the students of the university, is in the highest degree worthy of the long list of benefactions which have so conspicuously identified the name of Sage with the institutions of Cornell, and aside from the humane and benevolent purposes which it is destined to serve, it will be an invaluable addition to the practical organisation of the establishment as a whole. The jealous and almost fatherly interest of the elder Sage in the gradual development of the Cornell foundation has been proudly cherished by his sons, who, in this additional gift, valued in the aggregate at $200,000, have paid a beautiful tribute to the good man whose honored name they bear so worthily and so well.

The new Massachusetts Hospital for consumptives and tuberculous patients at Rutland, in Worcester county, says the *Evening Post*, will be opened for patients soon after New Year's. It was built under an act of 1895. Rutland was chosen as the site because of its excellent hygienic conditions. The buildings are about 1,200 feet above the sea level, and the conditions which are most favorable for consumptive patients, are found abundantly. The hospital will have accommodations for about 150 patients, and it is probable that the rooms will be filled in a short time, for there is no limit, anywhere near that number, to those who might be suitable candidates for admission. For the most part the inmates will be people who are too poor to care for themselves, representatives of the tenement-house population.

Dr. Abbott, Secretary of the State Board of Health, says that no special method of treatment will be followed at the hospital. It is not a place for experiments, and has not been established for the benefit of any particular school of medicine, nor for the sake of establishing any particular theory. The buildings consist of an administration building in the center of a group of low, one-story wooden buildings, arranged upon the arc of a circle, and alternately long and short, in order that free access may be given to the sunlight. The buildings on one side of the group are for men and the others are for women. Each long building has seven private wards, 9x12 feet, with open fireplaces ; also a general ward, 25x90 feet, with accommodations for 22 patients, each such ward having

large brick fireplaces and a ventilating shaft. There is also a "sun-room," composed wholly of glass, 12x27 feet. This is surrounded by a wide veranda. In the small buildings the general wards have only ten beds each. These wards also have their sun-rooms.

It is not expected that any regulations will be made to separate the patients from other people, although it is admitted that consumption is a contagious disease. Where there is so much open air and light, with fresh winds and purity generally, it is felt that the bacilli of the disease have little chance. Sunshine and air are in themselves destructive to disease germs. Two private hospitals for consumptives have existed in Boston for years, and last winter some neighbors made an onset upon the legislature to compel their removal, but though they had the support of two specialists, who testified for a fee of $50 each that the hospitals were a menace to the health of the neighborhood, the proof was so strong the other way that the effort was a failure. Dr. Abbott says that such hospitals are not the slightest danger to the neighborhood, as is proved by the long existence of several in the crowded parts of London.

During the recent slight fever scare in Memphis the students of the Memphis Hospital Medical College becoming panicky it was deemed advisable to take them away for a few days. Vanderbilt University, medical department, courteously extended the privileges of their excellent school to the faculty of the Memphis institution, who availed themselves of this by sending a number of students in charge of the dean, Dr. W. B. Rogers, to Nashville for a week.—*Memphis Medical Monthly.*

The staff of the Erie County Hospital held its annual meeting December 20, 1897, when the following officers were elected to serve for the ensuing year: President, Dr. William C. Phelps; vice-president, Dr. Henry C. Buswell; secretary and treasurer, Dr. Earl P. Lothrop; executive committee, Drs. E. P. Lothrop, H. C. Buswell, A. A. Hubbell, E. J. Meyer, F. S. Crego and H. U. Williams.

Public Health and Hygiene.

Buffalo continues to lead the list as the healthiest city of its class in the world. The reports for 1897 that are just now tabulating at the health office show the death-rate to have been 12.42 per

1,000 inhabitants, as against 12.72 for 1896. The total number of deaths for 1897 is given at 4,472, of which 2,266 were males and 2,206 females. The estimated population is 360,000.

In 1891 there were 6,001 deaths, an increase of 1,529 over 1897. The population in that year was estimated at 255,000.

Last year there were 8,983 births, of which 4,511 were males and 4,472 females. This is an increase of 569 over 1896, when the births were 8,414. There were 2,542 marriages last year as against 2,525 in 1896.

One of the most notable facts in connection with the record last year was the decrease in the number of deaths from cholera infantum. In 1896, 371 babies lost their lives from that disease. Last year the number was 277.

Dr. Wende figures that the good health of the people of Buffalo is largely due to the improvements made in the sanitary arrangements in the houses, to the excellent way his subordinates do their work and the strict enforcement of the health ordinances.

Book Reviews.

CUTANEOUS MEDICINE. A systematic treatise on the diseases of the skin. By LOUIS A. DUHRING, M. D., Professor of Diseases of the Skin in the University of Pennsylvania; author of A Practical Treatise on Diseases of the Skin and Atlas of Skin Diseases. Part II.—classification: Anemia, hyperemia, inflammations. Illustrated. Philadelphia: J. B. Lippincott Company. 1898.

The second part of this important work is in our hands and it is satisfactory to observe that it quite comes up to the expectations raised on seeing the first number. The subjects dealt with are anemia, hyperemia and inflammations.

In order to convey to the mind a correct idea of the arrangement of the diseases of the skin, the author introduces a brief synopsis of the classes as understood by Alibert, Wilson, Hebra, Auspitz, Bronson and Unna to enable the student and physician to conveniently examine and compare these several systems with his own, which, in this work, is a modification and elaboration of the author's old classification, placing special stress upon clinical features and normal anatomy as well as pathological anatomy.

The section dealing with anemia is concise and is discussed under the divisions of general observations—transient anemia, persistent anemia, general pathology and importance in diagnosis. The term hyperemia is used in its strict signification of a superabundance of blood overfilling the blood-vessels of the skin without giving rise to inflammation.

Inflammations are taken up next and gone into, both the superficial and deep-seated varieties, which, of course, include the consideration of the largest well-known list of maladies of which this condition is the basis.

Altogether the features of particular excellence of this work may be summarised as follows : The pathology is clear, up to date, concise and represents a vast amount of research, giving the reader all that is known, free from superfluous or confusing detail. Dr. Duhring again shows his genius in his clean-cut systematology and diagnosis. No dermatological writer can excel him in this particular field. He tersely gives a description so distinct and vivid as to carry to the reader, without question, a picture which becomes real and impressed upon his mind.

The illustrations in this work will be promptly observed as being of exceptional value. It is very difficult to represent by illustration the different features and phases of skin lesions. Much attention has been given to this in the various treatises with but disproportionate success. It can, however, be truthfully stated that those depicted in this work show the lesions and points to be observed, their peculiarities, better than in any other similar publication. No student or practitioner can fail to learn by looking even, nor fail to recognise in the prints the terse description given in the text.

Treatment of skin diseases always permits of latitude and different authorities often hold different views. Duhring gives briefly the various recommendations together with his own and following the tone of the whole work concisely and clear. It may be said that no teacher of dermatology is more successful in his practice, and his formulas, with which his book abounds, are in many instances standard. We can heartily, therefore, for these and many other reasons, recommend the work in the most unreserved way. Were the profession under no previous obligations to Dr. Duhring for his labors, they would be now. E. W.

SIMON'S CLINICAL DIAGNOSIS. New (2d) edition, revised and enlarged. A manual of clinical diagnosis by microscopical and chemical methods. For students, hospital physicians and practitioners. By CHARLES E. SIMON, M. D., late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. Octavo, 530 pages, with 135 engravings and 14 full-page colored plates. Philadelphia and New York : Lea Brothers & Co. 1897.

Clinical diagnosis, although rarely taught in the medical schools, is so important and necessary to the general practitioner that in the past few years a number of treatises have appeared bearing upon this subject. Two excellent works have appeared of late in America, and the book by Simon holds high rank with the others on the same subject.

No continuing success can be built on empiricism or upon the proportion of guess-work which is inseparable from dependence

upon the experienced eye. Diagnosis is now the password of medical science, and the more thorough and exact such diagnoses the more favorable and conscientious the treatment.

The author devotes nearly a hundred pages to the consideration of the blood, describing the various instruments for estimating the number of corpuscles, the amount of hemoglobin and the specific gravity. The microscopy and bacteriology of the blood are also carefully considered. A short chapter on the secretions of the mouth follows, dealing mostly with the condition of the saliva in various forms of stomatitis.

Chapter III. deals with the gastric juice and the gastric contents; Chapter IV. with the feces, first considering the examination of the normal feces, chemically and microscopically, then the pathological conditions, the presence of parasites, as protozoa and vermes and the condition of the feces in the various diseases of the intestinal tract. Chapter V. treats of the nasal secretion ; Chapter VI. of the sputum and Chapter VII. of the urine. The last chapter is gone over exceedingly thorough and complete and is accompanied by several full-page colored plates. Chapter VIII. deals with the transudates and exudates; Chapter IX. with the examination of the cystic contents; Chapter X. with the examination of the cerebro-spinal fluid; Chapter XI. with the semen; Chapter XII. with the vaginal discharge and Chapter XIII. with the secretion of the mammary glands.

The diction is easy and graceful, the descriptions clear and concise and the directions careful and comprehensive. It is a safe guide to follow and should be in the hands of all conscientious physicians. The plates are beautifully executed and the typography of the best. W. C. K.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania ; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen ; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume III. Seventh series. 1897. Octavo, pp. xii.—360. Philadelphia : J. B. Lippincott Co. 1897.

In this volume there is one lecture under the general head of Drugs and remedial agents, eight lectures under Treatment, ten

lectures under Medicine, two lectures under Neurology, seven lectures under Surgery, five lectures under Gynecology and obstetrics, one lecture under Ophthalmology, two lectures under Laryngology, pharyngology, rhinology and otology, one lecture under Dermatology—a total of thirty-seven discourses that are very well distributed among the important departments of medicine and surgery. The authors are for the most part men of considerable experience and some of them are of conspicuous eminence. Dr. E. L. Shurley, of Detroit, speaks interestingly as well as instructively, especially on the treatment of phthisis pulmonalis. This author has great experience in the diseases of the upper-air tract, being an accomplished laryngologist as well as skilful in internal medicine. What he says, therefore, on these subjects is entitled to great credence.

An especially interesting discourse is that on the surgical treatment of gall-stones by Prof. James F. W. Ross, of Toronto. No one is more competent to treat this subject scientifically than Dr. Ross. His lecture is illustrated by four schematic drawings in colors and a plate giving specimens of various gall-stones removed by operation.

A lecture by Dr. A. H. Freeland Barbour, of Edinburgh, on Bleeding in pregnancy and labor is of special interest and it is illustrated by six drawings.

A lecture by Prof. J. McFadden Gaston, of Atlanta, on Hematoma, also illustrated with a plate showing hematoma near the first lumbar vertebra following strain, deserves special mention. A number of other lectures are to be commended and the entire volume merits praise.

CLINICAL DIAGNOSIS: The Bacteriological, Chemical and Microscopical Evidence of Disease. By DR. RUDOLF V. JAKSCH, Professor of Special Pathology and Therapeutics and Director of the Medical Clinic in the German University of Prague. Translated from the fourth German edition and enlarged by James Cagney, M. A., M. D., Member of the Royal College of Physicians of London; Physician to the Hospital for Epilepsy and Paralysis, etc. Third edition. Octavo, pp. xxv.—523. With numerous illustrations (partly in colors). London: Charles Griffin & Company, Limited, Exeter street, Strand. 1897

The appearance of the third English translation of the fourth edition of this classical work on Clinical diagnosis shows the popularity and esteem in which it is held by the continental and English physicians. American physicians are beginning to appreciate the value and efficiency of this work and well they may, for it stands for all that is exact and authoritative in the most important branch of the medical sciences. The thoroughness of the work may be judged somewhat by the references to literature. Thus, in the chapter on the urine, 770 references are given, while on the blood 383 references are noted.

Chapter I. treats of the blood, the author discussing the color, reaction, specific gravity, changes in the formed elements of the blood, parasites of the blood and the chemical changes. The author describes carefully all the various instruments for estimating the specific gravity, amount of hemoglobin and the number of red and white corpuscles. Chapter II. is devoted to the buccal secretions, the coatings on the tongue and teeth, and the condition of the saliva in certain diseases. Chapter III. treats very briefly of the nasal secretion. Chapter IV. takes up the sputum, the microscopical and bacteriological examinations and the character and constituents of the sputum in the principal diseases of the lungs and bronchi. Chapter V. discusses at some length the gastric juice and vomit. Chapter VI. treats of the feces. Chapter VII., the examination of the urine. Chapter VIII., the investigation of exudations, transudations and cystic fluids. Chapter IX., the secretions of the genital organs, and Chapter X. of the methods of bacteriological research. A very complete bibliography of sixty-two pages follows and then a good index. There are 157 illustrations, nicely executed, many in colors. For those who wish to consult all that has been published of merit on the subject of clinical diagnosis, no better work can be recommended than v. Jaksch's.

The work is well printed on good paper, but deserves a better binding. W. C. K.

A Manual of Legal Medicine for the Use of Practitioners and Students of Medicine and Law. By Justin Herold, A. M., M. D., formerly Coroner's Physician of New York City and County, etc., etc. Octavo, pp. xv.—678. Philadelphia: J. B. Lippincott Co. 1898.

The author of this book states that he has prepared it not only to embrace the contents of the more elaborate and classic works in a book of medium size, but to present them together with original material condensed into a comparatively small but not too scant space. It is a recognised fact that busy physicians cannot always find time to familiarise themselves with the facts and theories of encyclopedic works; such, however, will find this treatise an excellent one to consult. It is written by a man of practical experience in the conduct of medico-legal cases.

The work is divided into two parts: the first being devoted to the consideration of toxicology, to which sixteen chapters have been assigned, and the second part to forensic medicine, including pharmaceutical jurisprudence, to which twenty-six chapters are appropriated. In one chapter the duties and powers of coroners are considered. While the office of coroner is of ancient origin, it is one that nowadays seems ill-adapted to our necessities and environment. Herold makes reference in the same chapter to expert witnesses. It seems to us that it would be a good plan, now that public attention is turned toward reforms in these matters, to

abolish coroners and expert witnesses together, as both have brought reproach to the profession of medicine. Instead, let us have official medical examiners, according to the fashion in Massachusetts, to take the place of coroners, and commissions appointed by the court to take the place of expert witnesses.

One of the chapters is devoted to the consideration of life insurance, which will be found of interest to every physician. It would be the work of supererogation to review this book, chapter by chapter, but it is proper for us to affirm that it will be found helpful to every physician who has to do with medico-legal cases, and to both medical and law students. Especially do we commend it to such as have neither time, inclination nor means to obtain and study the larger works on medical jurisprudence.

PATHOLOGICAL TECHNIQUE. A practical manual for the pathological laboratory. By FRANK B. MALLORY, A. M., M. D., Assistant Professor of Pathology, Harvard University Medical School; Assistant Pathologist to the Boston City Hospital; Pathologist to the Children's Hospital and the Carney Hospital. Boston, and James H. Wright, A. M., M. D, Director of the Laboratory of the Massachusetts General Hospital; Instructor in Pathology, Harvard University Medical School. Octavo, 397 pages, with 105 illustrations. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

This book is designed especially for practical use in pathological laboratories, both as a guide to beginners and as a source of reference for the advanced. The book will also meet the wants of practitioners who have opportunity to do general pathological work.

The work is divided into three parts—Part I. being devoted to post mortem examinations, Part II. to bacteriological examinations and Part III. to histological methods, both for normal and pathological histology. The chapters on post mortem examinations are carefully and fully written, even going into the minutiæ of details. As a rule too little time is given in medical curricula to this most important subject, and the physician's knowledge is generally derived from personal experience. The authors insist upon thoroughness in all details of the autopsy and the importance they give to this subject is praiseworthy and timely. Very often the life and liberty of an individual depends upon the findings of an autopsy, and when inexperienced operators perform the work misinterpretation of the conditions present may do the accused party great injustice.

The authors have not given all the different methods and formulæ employed in the laboratories, but have chosen those which have been found of the greatest service in practical work.

The illustrations are well chosen, nicely executed and carefully described. The index is very complete, adding greatly to the value and accessibility of the different methods. The book is well

printed on good, heavy paper, and is a welcome addition to libraries of laboratory workers. W. C. K.

LECTURES ON THE MALARIAL FEVERS. By WILLIAM SIDNEY THAYER, M. D., Associate Professor of Medicine in the Johns Hopkins University. Small octavo, pp. vi.—326. New York: D. Appleton & Co. 1897.

In this treatise, which is a grouping of nine lectures delivered at Johns Hopkins University, the author has outlined the present scientific knowledge of which we are in possession concerning the malarial fevers. It is based on the parasitic origin of these fevers according to the discovery of Laveran, made in Algeria in 1880, and published in the *Bulletin* of the Academy of Medicine of Paris on the 23d of November in the same year.

Thayer draws attention at the outset to the improper use of the term "malaria" so common on the lips of the laity. Scientific men understand that there is no disease named malaria; nevertheless, they frequently permit themselves to apply the word in that sense, hence the laity have readily fallen into an error that it will be difficult to correct. It is quite proper, as Thayer points out, to use the term "the malarial fevers," by which is meant a class of fevers due to a specific microörganism which yields to treatment by quinine.

Thayer traces the disease through the various blood changes that it causes, gives a clinical description of the maladies in question, describes their sequelæ and complications, their morbid anatomy and general pathology, devoting his last lecture to diagnosis, prognosis, treatment and prophylaxis. The text is supported by nineteen illustrative charts, showing the temperature curves in the several forms of these fevers and three plates depicting the parasites that belong to each class.

No one can fail to appreciate the value of this work who will read it; for it is the most distinct contribution to the literature of the subject that has yet appeared and must necessarily take high rank in scientific medicine.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By JAMES M. ANDERS, M. D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, etc. Octavo, pp. 1287. Illustrated. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

A new treatise on internal medicine must present some essential reason for its appearance at this time in order to attract the eye of the profession. The tendency of practical physicians is toward the purchase of monographs. Text-books, therefore, must be written mainly in the interest of students. It must be confessed that this author, being a practical teacher, has presented his book in a

form that will make it especially attractive to the student. Take, for instance, the section (the book is not divided into chapters in the ordinary way) on diphtheria, which is considered under the following heads : definition, pathology, etiology, immunity, symptoms, complications, diagnosis, prognosis and treatment. Each of these also have subheads, of which the following is an example : general head, etiology; subheads, bacteriology, cite of infection, the toxins, associated microbes, modes of infection and predisposing factors. It will be readily understood how easily accessible a particular subject becomes in a treatise classified in this manner.

Anders has paid special attention to the clinical pictures of disease, though he has not neglected pathology. In considering the etiology of most affections, he has given prominence to bacteriological phenomena. Another interesting feature of this treatise is the fact that in many instances differential diagnosis has been tabulated, there being no less than fifty-six diagnostic tables scattered throughout the work, most of which are original. The author is to be congratulated upon the adoption of modern orthography and terminology, which is in accordance with the judgment and practice of modern lexicographers. It is difficult to understand how authors and editors still cling to diphthongs and other ancient methods of spelling in spite of the best modern authority on philology.

In such a work it would have been in order to have illustrated more profusely ; nevertheless, the pictures published are of excellent quality and helpful in character. The paper is not heavy, but is well finished, and the presswork is admirable. We have no doubt this treatise will become a text-book in many, if not the majority, of our medical colleges.

TEXT-BOOK OF NERVOUS DISEASES. By CHARLES L. DANA, A. M., M. D., New York. Fourth revised edition. One volume, octavo, 640 pages. Illustrated. New York : William Wood & Company. 1897.

The earlier editions of Dana's text-book of nervous diseases have been thoroughly reviewed in the JOURNAL, so that the present edition needs no word of recommendation or introduction to the profession. This edition has been changed in some respects, some of the chapters entirely rewritten, as those on acute encephalitis, multiple sclerosis and combined sclerosis ; also the chapters on neurasthenia, while others have been rearranged and modified. The chapters on the microscopic anatomy of the nervous system and on the anatomy of the spinal cord and brain are practically new and have been made to conform more completely with present views regarding the importance of the *neuron*. Some new illustrations have been inserted while others have been removed, and yet the volume is not more bulky than the third edition.

The last edition upholds the reputation of the former editions as being the leading American text-book on nervous diseases.

The typography, under the supervision of Wm. Wood & Co., is of the best. W. C. K.

INDEX CATALOGUE of the Library of the Surgeon-General's Office United States Army. Authors and subjects. Second series. Vol. II. B. BYWATER. Washington: Government Printing Office. 1897.

This book, which is the second volume of the second series of this great catalogue, contains 15,732 author-titles, representing 6,383 volumes and 14,802 pamphlets. It also contains 5,774 subject-titles of separate books and pamphlets and 21,725 titles of articles in periodicals. It is prepared under the direction of the surgeon-general by Col. D. L. Huntington, M. D., deputy surgeon-general, U. S. Army, at Washington.

THE ESSENTIALS OF OBSTETRICS. By CHARLES JEWETT, M. D., Professor of Obstetrics in the Long Island College Hospital, Brooklyn, New York. Duodecimo volume of 356 pages, with seventy-eight illustrations and three colored plates. New York and Philadelphia: Lea Brothers & Company. 1897.

The purpose of this work is modestly stated by the author in the following words: "If these pages shall be found useful as an introduction to the more elaborate treatise, and as a guide in following the didactic and the practical teaching of the college course, the author's object will have been gained."

Dr. Jewett is an experienced teacher and well knows the needs of the student. He has succeeded in producing a practical book that is concise, yet clear in its descriptions, elementary in character and helpful in form. When a student begins the study of obstetrics he cannot do better than to adopt this book as a guide.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume VI. Baltimore: The Johns Hopkins Press. 1897.

This excellent report, containing 414 pages, is devoted to several different departments of the hospital and shows what careful, painstaking work is done by the heads of the various departments. The volume contains a masterful study of the lesions produced by the action of certain poisons on the cortical nerve cell by Henry J. Berkley, illustrated with some of the most beautiful photomicrographs of nerve cells that the reviewer has ever seen.

The report in pathology embraces several sub-reports by Drs. Thomas S. Cullen, G. P. Wilkins, William D. Barker and Simon Flexner, as Fatal puerperal sepsis due to introduction of an elm tent; Pregnancy in a rudimentary uterine horn, rupture, death; Probable migration of ovum and spermatozoa; Adeno-myoma uteri diffusum benignum; A bacteriological and anatomical study

of the summer diarrhea of infants ; and The pathology of toxalbumin intoxication.

The illustrations, twenty-four plates, many colored, are models of their kind and add materially to the value of the reports.

W. C. K.

ATLAS AND ESSENTIALS OF BACTERIOLOGY. BY PROF. K. B. LEHMANN. Würzburg and Dr. Rudolf Neumann, Würzburg. Sixty-three chromo-lithographic plates, comprising 558 separate figures, with explanatory text facing plates and 128-page treatise. Illustrated. New York: William Wood & Co. 1897.

This volume is similar in size, appearance and general arrangement to those issued during the past year—namely, on ophthalmology, nervous diseases, fractures and dislocations, obstetrics and gynecology. The full set, making a handsome addition to a physician's library, may be obtained for $15.

The volume in question is edited by two of the leading bacteriologists of Germany and gives, as no other work can for the money, a complete and accurate pictorial portrayal of the various known microörganisms, both the culture and the microscopical appearance. The volume contains sixty-three chromo-lithographic plates, comprising 558 figures, and numerous engravings. The text, 135 pages, is devoted to the methods employed in the bacteriological laboratory, the description of the various bacteria and a carefully-prepared index.

The volume is a handsome illustration of the bookmaking and chromo-lithographic art.

W. C. K.

BOOKS RECEIVED.

Diseases of the Eye. By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon at St. Thomas' Hospital, London ; Surgeon to the Royal London (Moorfields) Ophthalmic Hospital. Revised and edited by W. T. Holmes Spicer, M. A., M. B., F. R. C. S., Ophthalmic Surgeon to the Metropolitan Hospital and to the Victoria Hospital for Children. Fifth American from the sixth English edition. With a supplement on color blindness by William Thomson, M. D., Emeritus Professor of Ophthalmology in the Jefferson Medical College of Philadelphia. Handsome 12mo of 521 pages, with two colored plates and 161 engravings. Cloth, $2.25. Philadelphia and New York : Lea Brothers & Co., Publishers. 1897.

Biennial Report of the Department of Health of the City of Chicago. For the years 1895 and 1896. William R. Kerr, Commissioner of Health. Chicago : 1897.

Manual of Pathology, including Bacteriology, the Technique of Post mortems and Methods of Pathologic Research. By W. M. Late Coplin, M. D., Professor of Pathology and Bacteriology, Jefferson Medical College, and Pathologist to Jefferson Medical College Hospital and to the Philadelphia (Blockley) Hospital ; Bacteriologist to the Pennsylvania State Board of Health. Being a second edition of the

author's lectures on pathology, rewritten and enlarged. Small octavo, pp. xxi.—638. With 268 illustrations, many of which are original. Price, $3.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

Report of the Commissioner of Education. For the year 1895-96. Volume II. Containing Part II. Washington: Government Printing Office. 1897.

The Care and Feeding of Children. A catechism for the use of mothers and children's nurses. By L. Emmett Holt, M. D., Professor of Diseases of Children in the New York Polyclinic; Attending Physician to the Babies' Hospital and the Nursery and Child's Hospital, New York. Second edition, revised and enlarged. Duodecimo, pp. 104. Price, cloth, 50 cents. New York: D. Appleton & Co. 1897.

Diseases of the Stomach. Their special pathology, diagnosis and treatment, with sections on anatomy, physiology, analysis of stomach contents, dietetics, surgery of the stomach, etc. In three parts. By John C. Hemmeter, M. B., M. D., Philos. D., Clinical Professor of Medicine at the Baltimore Medical College; Consultant to the Maryland General Hospital, etc. Royal octavo, pp. xvii.—788. With many original illustrations, a number of which are in colors and a lithograph frontispiece. Price, $6.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

A Clinical Text-Book of Surgical Diagnosis and Treatment. For practitioners and students of surgery and medicine. By J. W. Macdonald, M. D., Graduate in Medicine, of the University of Edinburgh; Licentiate of the Royal College of Surgeons, Edinburgh; Professor of the Practice of Surgery and of Clinical Surgery in Hamline University, Minneapolis, etc. Royal octavo, pp. 798. With 328 illustrations. Price, cloth, $5.00; half morocco, $6.00, net. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

Twelfth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Volumes I. and II. 1896.

Transactions of the Colorado State Medical Society. Twenty-seventh Annual Convention. By-laws and list of members. Denver, June, 1897.

An Epitomé of the History of Medicine. By Roswell Park, A. M., M. D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Illustrated with portraits and other engravings. One volume, royal octavo, pages xiv.—348. Extra cloth, beveled edges, $2.00, net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street; New York: 117 W. Forty-second street; Chicago: 9 Lakeside Building.

Clinical Methods, being an Introduction to the Practical Study of Medicine. By Robert Hutchison, M. D., M. R. C. P., Demonstrator of Physiology in London Hospital Medical College, and Harry Rainy, F. R. C. P. P., F. R. S. E., University Tutor in Clinical Medicine, Royal Infirmary, Edinburgh. Handsome 12mo, 562 pages, 137 engravings and 8 colored plates. Cloth, $3. Philadelphia and New York: Lea Brothers & Co., Publishers.

Literary Notes.

THE editors of the *Laryngoscope*, St. Louis, announce that, beginning with the January, 1898, issue, Messrs. John Wright & Co., of Bristol, Eng., will publish a foreign edition of that magazine. It is believed that this is a new departure in the field of American journalism and, we think, a distinct recognition of the advance made by the American medical profession in the trio of specialties represented as reflected through the pages of the journal in question.

THE *Georgia Journal of Medicine and Surgery*, edited by St. J. B. Graham, M. D., J. A. Van Marter, Jr., M. D., and W. E. Fitch, M. D., henceforth will contain from 75 to 100 pages instead of 50 pages as heretofore. The *Journal* has been improved in many ways, and the aim of the editors is to maintain the highest of professional standards. The publication office is 127–129 Liberty street west, Savannah, Ga., where all exchanges should be addressed.

THERAPEUTIC PROGRESS is the name of a monthly leaflet of eight pages published by Victor Koechl & Co., 79 Murray street, New York. It is devoted to a consideration of the newer remedies imported by this firm, among which may be mentioned argonin, benzosol, diphtheria antitoxine ("Behring"), tuberculin ("Koch") and others. Antipyrin, lanolin and dermatol are also included among the valuable preparations for which the above firm are sole agents for the United States. One particularly desirable feature of *Therapeutic Progress* is the condensation of reports and the like into as small a compass as possible, all useless elaboration and padding being eliminated. The publishers will be glad to mail copies regularly, free of charge, to any physician who may desire to have it. We have, from time to time, gleaned valuable and practical therapeutic hints from its perusal. Address Victor Koechl & Co., 79 Murray street, New York.

CURRENT THOUGHT is the name of a new quarterly published at Cleveland, O. Heretofore the publication has been issued as paper-covered books, called Current Thought Library. Mr. C. Elton Blanchard, the editor of this journal, was formerly publisher of the *Cleveland Medical Gazette* and is an active student of anthropolog-

ical questions, being a lecturer and director of the American Institute of Anthropology. The medical profession will find much of interest in *Current Thought*, as will any thinking man or woman. Specimen copies will be sent upon request.

The *Albany Medical Annals* for February, 1898, will be an extra number upon subjects pertaining to hospitals—their construction and administration. The following articles will be included in this publication : A description of hospital buildings on the pavilion plan, by Albert Vander Veer, M. D., attending surgeon Albany Hospital ; The construction of hospitals, by P. M. Wise, M. D., president New York State Commission in Lunacy ; The warming and ventilation of hospitals, by Fred. P. Smith, heating engineer for New York State Architect and Capitol Commissioners, Albany, N. Y.; The plumbing of hospitals, by Wm. Paul Gerhard, C. E., consulting engineer for sanitary works, New York ; Hospital equipment, by C. Irving Fisher, M. D., superintendent of the Presbyterian Hospital, New York ; The medical service of hospitals, by Henry M. Hurd, M. D., medical superintendent of the Johns Hopkins Hospital, Baltimore. These papers will be appropriately illustrated. The reputations of the contributors are so well known that the latest accepted ideas upon the subjects treated are assured and a variety of practical topics, not elsewhere to be found, will be presented for reference to all who are interested in the management of hospitals. The price of this number of the *Annals* to nonsubscribers will be 25 cents, post-paid. All orders should be addressed *Albany Medical Annals*, Albany, N. Y.

The *International Medical Magazine*, edited by Dr. Walter L. Pyle, has removed its office from 3709 Spruce street to Professional Building, 1831–33 Chestnut street, Philadelphia. Exchanges are requested to make a note of this on their mail lists.

M. J. Breitenbach Company, 56–58 Warren street, New York, have our thanks for a valuable year-book containing separate pages for daily memoranda during the year 1898, suitable for the physician's desk. It is one of the most convenient books of its kind we have seen.

Items.

FINED UNDER THE MEDICAL REGISTRATION LAW.—In the Municipal Court at Boston, recently, Judge Ely fined Augustus R. Gilmore $200 for styling himself a "doctor" on his cards. The defendant claims to effect cures by the laying on of hands. He appealed and was held in $500 bail for the upper court.—*Boston Medical and Surgical Journal, December 16, 1897.*

A CERTAIN eastern firm has been doing some very unique and attractive advertising of friable pills. We recently had some experience with the pills, however, which makes us a little cautious about believing all that advertisers may say. Commencing in the morning, we gave a little fellow during the day eight one-grain quinine pills of the friable variety. No result followed, but the nurse next morning showed six of these which had passed intact through the alimentary canal. The trouble was, the poor little mortal did not carry in his stomach a hammer and board with which to crack them open. A pill to do good must be covered, if covered at all, with something that the juices of the digestive tract will act upon, and not necessarily that can be crushed between the thumb and finger. The average human being does not carry a hammer in his stomach.—*Western Medical Review.*

THE Medical Society of the State of New York will hold its ninety-second annual meeting at the Germain Hall, Albany, Tuesday, Wednesday and Thursday, January 25, 26 and 27, 1898, under the presidency of Dr. Seneca D. Powell, of New York. Business committee: Dr. W. G. Macdonald, chairman, 27 Eagle street, Albany; Dr. Ernest Wende, 471 Delaware avenue, Buffalo, and Dr. B. Farquhar Curtis, 7 E. 41st street, New York.

THE American Pediatric Society, in making a collective investigation of infantile scurvy in North America, sends out the following circular:

The Committee for the Collective Investigation of Infantile Scurvy, appointed by the American Pediatric Society at its meeting in 1897, requests reports upon cases of this disease, whether previously published or otherwise. Will you kindly answer the questions appended as

fully and as promptly as possible ? Please write out the answers ; do not cross out the questions. Answers may be sent to, and additional blanks obtained from, any of the members of the committee. Full credit will be given, and no case will be used in such a way as to interfere with its subsequent publication by the observer. A final printed report of the investigation will be sent to those furnishing cases. When the blank space allotted is not sufficient for a complete answer, please write the answer upon the back of the sheet, numbering and lettering it properly, and writing "over" opposite the printed question. Will you kindly notify us of other physicians whom you believe to have had cases of infantile scurvy under their care.

Returns close April 1, 1898.

[Signed].

J. P. Crozer Griffith, M. D., Chairman, 123 S. 18th St., Phila.
William D. Booker, M. D., 853 Park Ave., Baltimore.
Charles G. Jennings, M. D., 457 Jefferson Ave., Detroit.
Augustus Caille, M. D., 753 Madison Ave., New York City.
John Lovett Morse, M. D., 317 Marlboro St., Boston.

Committee.

L. EMMETT HOLT, M. D., President.

Requests for blank forms may be sent to Dr. Irving M. Snow, 476 Franklin street, Buffalo, N. Y.

Mid-Winter Sun Baths.—The Clyde line is advertising mid-winter sun baths in connection with its Florida service. This is not a bad idea, as it is a well-known fact that the sun shines in Florida almost every day in the year. Truly, this tropical state is a "land of flowers and sunshine" and nature in all her glory reigns supreme there every day in the year. Thither the ailing ones have gone by the thousands ; they return only to tell the delightful tales of this big and hospitable state. First, the old folks went to Florida, but now the old and young both congregate at the various Floridian resorts to do homage to nature, by nature blest and benefited in health and happiness. The Clyde line of steamers from New York to Jacksonville is the ideal way to reach the sunny South. The steamers from New York to Charleston make the trip in about two days ; at the latter point they stop just long enough to give the passengers an opportunity to see this old and historic city. Thence the magnificent steel steamers wend their way to Florida, landing in Jacksonville in daylight, making the trip in all about three days from New York to the metropolis of the most tropical state in America.

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Original Communications.

THE JEW IN MEDICINE.[1]

BY JULIUS ULLMAN, M. D.,

Attending physician German Hospital Dispensary.

THE Jew, in the centuries which have passed, has been the target for persecutions and massacres and a scape-goat against whom was directed the contempt of the semi-barbarous nations; but though the hand of his oppressor may have dwarfed his body and painted, with too vivid a coloring, pain and suffering upon his countenance, his mind and spiritual self have ever remained his own and have, in part, given to posterity that knowledge in science, philosophy and the arts which it now possesses.

In no field of the Jew's activity, unless it be in the perpetuation of the divine laws, has more been accomplished by him, directly and indirectly, than in medicine, and it is in this channel of work, so well performed in the past, to which the writer would refer.

The ancient Jews were but a part of the Semitic nations—Phœnicians, Assyrians and Babylonians—all of whom had perhaps a higher degree of civilisation than they, and hence the Jews were influenced by them because of their involuntary exile among them. Unlike these nations, the Jews were not believers in mythology, but were monotheists and regarded Jehovah not only as their one and only God, but as their physician, for the bible reads: "I, Jehovah, am thy physician."

Jehovah was regarded as the great cause of disease, for He punished with disease the transgressors of His commandments. Deuteronomy, xxviii.-21, reads: "The Lord shall make the pestilence cleave unto thee, until he have consumed thee from off the land, whither thou goest to possess it." Again, the bible reads: "The Lord shall smite thee with the botch of Egypt, and with the

1. Read before the Buffalo Academy of Medicine, Medical Section, December 14, 1897.

emerods, and with scurvy, and with the itch whereof thou canst not be healed."

It is inferred from the above quotations that the Hebrew was taught the theological doctrine of the cause of disease, but, unlike other creeds, did not believe in the theological doctrine of the cure of disease.

Moses is the father of medical police and public hygiene. The Mosaic laws, in their beneficent wisdom, are instruments by which he influenced the Israelites.

Circumcision was introduced as a religious ritual, and of its import, as to cleanliness and immunity to disease, but little need be said here.

The terming of a woman during the few days following her menstrual period as unclean and unfit for cohabitation is mentioned, and Moses here displayed his wisdom, not only as a hygienist, but as a statesman and sociologist. He did not desire too great a fruitfulness, especially as it was said, and is known, that Jewish women bore children oftener and more easily than did the Egyptians.

The laws, among other things, forbid the marriage of kindred, speak of the situation of cemeteries, time of burial, isolation of the sick (certainly a forerunner to the study of infection, the germ theory of disease,) and the use of vessels employed by the latter. There are strict regulations as to the kind and preparation of food and precepts as to the admissible animals. Swine were especially not allowed. This was due to the prevalence at that time of a disease simulating trichinæ spiralis poisoning. It is strange if something as to the relationship between the cause and the effect of the disease should not have been known to Moses.

The animals for slaughter are inspected by especially trained observers, called chobets, and if the meat is diseased it is unclean.

In this law lies the truth that pulmonary tuberculosis is very rarely seen, comparatively, among the Jews. The records of the Jewish Hospital, of New York, according to Remondino, give, out of 28,750 persons admitted, only 44.57 per 1,000 of its admissions as being due to phthisis; while those of the Roosevelt Hospital, out of 25,583 admissions, give, as per 1,000, 67.93.

Rev. Dr. Louis Grossman, in an article on the medicine among the Jews, says:

One provision of the Mosaic dispensation is worthy of a special remark. Moses provides that a man who has recently married a woman shall not go to war within a year after his marriage. Moses knew that

soldiery constituted the most virile part of the people and he wished to conserve the sturdy quality of the reproductive capacities. What wars have done toward depriving the nations of their most healthful stock, and of the vital germs of other possible lives, we cannot surmise.

From the foregoing it is seen that, from earliest times, the Jews were taught that the observance of certain ordinances were both conducive to health and the prevention of disease. This was equivalent to the teaching that disease originated from physical causes and that physical means were to be used to combat disease. Ecclesiastes xxxviii. reads: "When thou art sick call upon God and bring a physician, for a prudent man scorneth not the remedies of the earth."

There was a practice in vogue among the early Hebrews of exposing the sick in public places, so that they might receive the benefit of those who had experience in a similar case before. So, from religion and custom the medicine of the Hebrew has received its foundation of intelligent philosophy which was to carry it in its purity through all ages free from magic, superstition and imposture.

The Levites, in their priestly calling, are to be regarded as the first body of physicians, and of their private practice but little is known. Their office may be likened to that of a quarantine officer of today. They investigated the purity of men and women and examined suspected cases of leprosy. When pronounced unclean, the patient was sent without the camp and dare not return until he had performed ablution and was pronounced clean again.

King Solomon and the prophets also acted in the capacity of physicians. The Talmud opened a new era in medicine. After the destruction of Jerusalem and its temple by Titus, 70–79, and the simultaneous downfall of the Jewish schools, colleges were erected in distant parts for the preservation of the pure faith. These institutions were presided over by eminent rabbis who were versed in medicine. Rabbi Gamaliel taught at Jabuet, near Jerusalem; Rabbis Simeon and Jehuda Hakkadesch at Tiberias; Rabbi Samuel at Nahardea, in Mesopotamia; Rabbi Abba Arecha at Nechesja, on the Euphrates; Rabbi Judas at Alexandria, and Tobias, of Modain, at Jerusalem.

From a modern standpoint, the Talmud is to be considered as an encyclopedia. It consists of the interpretations, traditions and decretals of the rabbis in the most diverse directions and on the

most varied topics, philosophical, religious, medical and legal. The medicine of the Talmud was very crude. Diseases were named as to the organs affected, such as heart disease and intestinal diseases. Sometimes they were named from the principal symptoms, as jaundice, dropsy and the like. Surgically, it considers dislocations, contusions, trauma of the vertebræ, perforations of stomach, esophagus or intestines. It was considered dangerous to operate with iron instruments; wooden were employed. Cesarian sections were performed. Diagnosis was purely empirical. There were critical signs for prognosis, such as perspiration, sneezing, dreams, pollutions. Anatomy was somewhat understood, for, according to the Talmud, the human body consisted of 248 bones. It is related (Talmudic Miscellany, Husham, 1880; Trübner's Oriental series) of Rabbi Ishmael's disciples that they dissected a low woman, who had been condemned by the government, and that they found 252 bones.

Of greatest importance is the Talmud as a work of hygiene. It treats of uncleanliness, with many sanitary rules and regulations. It treats of plagues, contagions, disorders, leprosy and methods of isolation. It treats of houses as well as tents, with special reference to the contaminating presence of the corpse. It prescribes the immersion bath and especially gives rules as to the cleansing of hands.

The era of the Talmud was the first five centuries. With the medicine of the Talmud terminated medicine as treated in special Jewish works, for history seems to have ignored the Jews as a nation so soon as they quit wielding the sword, and the Jews lost their individuality in literature, but became the teachers and translators for other nations.

During the third and fourth centuries the Jews were the victims of persecutions by the Persians (and Bishop Cyrellin, of Alexandria), but with the birth of Abul Kasem Mohammed, 571 A. D., the Arabian empire was born with a new religion and a thirst for higher knowledge. The Arabs became possessors of Syria, Palestine and Egypt and became acquainted with Greek culture. They were the friends of culture and the lovers of the learned, and the Jews found here a friendly home among the Arabs, for the Arabic language was closely allied to the Hebrew, and Hebrew literature was admirably adapted to the taste of the Arabian. The Jews became the greatest teachers in the Arabian schools situated at Basra, Bagdad and Kufa.

During the eighth and ninth century it was not infrequent to find that the Jews were ordinary, or body, physician to the caliphs. The Jewish physicians reached such repute in Arabia that they invoked the jealousy of the Arabians, and Caliph Montawakkel decreed that the Jewish students should be taught only in the Arabian and Syrian language, not in the Hebrew.

One of the greatest physicians of this time was Isaak Ben Soleiman, 830 to 940. He wrote on fevers, dietetic subjects and deportment and conduct of the physician. He introduced senna, a drug now universally used. He was ordinary physician to the sultan of Morocco, Abu Mohammed el Mahdi. He died a centenarian, beloved by all, and so important were his writings that his works were still published in Venice in 1515, six centuries after his death.

The Jews were a great maritime race. They were the possessors of fleets which were to be seen in all the known parts, so that by their contact with the foreign nations they inculcated the influence of their ancient wisdom and in return learned the foreign languages, thereby becoming the great linguists of those ancient days. It therefore became possible for the Jew to introduce into Western Europe a portion of the science of the ancients.

When science was renewed it began in the foundations laid down by the Greeks. Adam, in his civilisation during the middle ages, writes: "In every line the first step was to find out what the ancients had known and then to begin a new progress from the point which they had reached." The first medical lectures then were but comments on the Greek text. Here, again, the Jewish physicians showed their ability because of their aptitude as translators and interpreters of the text.

Salerno, south of Naples, and Montpellier, in France, were the renowned schools of learning. Here not only was divinity and philosophy taught, but medicine as well. In Salerno, Elisus, a Jew, was one of a trio of learned men who gained such a reputation for the school, and Copho, one of its pupils, whom Häser mentions as one of the greatest physicians and writers of his time, was a Jew. At Montpellier the Jewish physician, Jakub Ben Makir, was rector of the university and to this day its school of medicine remains as her chief ornament.

It may, however, be said that before the rise of the schools of Salerno and Montpellier the only physicians throughout the then known world were Jews, and though they were afterward joined

by the Arabs in Spain they again became, at the expulsion of the latter from the country, the sole representatives of the medical sciences. Because of their skill the Jewish physicians occupied important offices of trust in the government, so we find Hasdai Ben Shahroot the physician and prime minister to Abdahrahman III. of Cordova. Isaac Arbarbanel, minister of France under Ferdinand and Isabella, is said to have been educated as a physician.

In those dark and middle ages, when men reasoned nothing from a physical basis, but attributed all phenomena to a supernatural agency, either heavenly or diabolical, the old maxim that "in ignorance there is bliss for it is folly to be wise" was so true. If the renown as physicians and their medical skill forced the Jews into places of trust and on the pinacles of fame, it also exposed them to inevitable dangers. If successful the physician was liable to a suspicion of sorcery and unlawful dealing. Knowledge and magic were so closely allied in the popular mind, that a wonderful cure wrought by a Jew could not be wrought by science, still less by divine aid, therefore must be wrought by diabolic aid. If the Jewish physician were unsuccessful, the dying patient must have been the victim not of an incurable malady or even ignorance. The Jewish physician must knowingly have administered poison, as was charged against Zedekiah, the court physician of Charles the Bald, 798 to 814.

The church held science as the seed of the devil. The monk and the priest were prohibited from studying medicine. In order that religion might control the body as well as the mind, science was allowed to slumber. Still the priests disported themselves and even received the title of physicians. Medical practice became debased, as may be inferred from the fact that prayer, the imposition of hands, exorcism, rings, sacred symbols, holy oils, bones, rags, sacred relics, conjurations, crossings, and the like, were openly employed by the Catholic clergy. Is it to be wondered that with such medical practices that there were great plagues and epidemics?

The Jews, because of their knowledge of the Pentateuch and their study of the Talmud, were exempt from plagues and epidemics. Dr. B. W. Richard, on Relation to race to disease, states that from epidemics the Jews have often escaped as if they possessed a charmed life. Because the Jews were exempt from these plagues and epidemics they were said to be in league with the devil and to have poisoned the wells, and as a result, Remondino states, that the rational and law of nature observing Jew could

neither be seen or heard in his own defense. The cry of Hep, Hep, (Hep, Hep, three initials of three words *Hirrusalem est perdita*, according to Isador Loeb—Heb, Heb, Stop! Hold him!) was raised, and it spread, gained in intensity, and such insane torture as the popular fury could suggest were the human manifestations with which a Christian people visited their Jewish brothers, whose only sin consisted in worshiping the God of their fathers and in strictly observing His laws and commandments.

Among the reasons given for the expulsion of the Jews from Spain, in 1492, was the crucifixion at different times and the poisoning of patients by Jewish physicians.

It was in this same Spain that the golden age of the Jewish physician shone with the mightiest and most enduring splendor. This period extended until the end of the X. century. While Christian Europe lay in darkness, Mohammedan Cordova might be considered the center of civilisation, arts and letters, and Millman, in history of the Jews, states that the Jews, under the employment of equal rights and privileges, rivaled their masters, or rather their compatriots, in their advancement to wealth, splendor and cultivation.

It was at the end of this period that two great Jewish physicians lived. Abernan Avenzoar, whose father, cousin and grandfather were physicians, was born about 1070 at Pentaflor, near Seville, in Spain. He was the most noted physician of his time in Spain and Africa. He died in 1162, honored as the wise and illustrious. He practised surgery, although in his time it was considered as a disgrace. He performed experimental operations; the first total extirpation of the uterus is attributed to him and therapeutically he recommended the milk cure in consumption. He wrote eight works, one of which was a treatise on fevers, De febribus, which was printed in Venice as late as 1497.

About the same time there lived the greatest of physicians among the Jews, Rabbi Ben Moses Maimon, called Maimonides. He was the speculative parent of Spinoza and Mendellsohn. He was born in Cordova in 1135. In his early manhood he was a judge, but, unfortunately, he was the victim of persecutions against his people by the Mohammedans, and seeking refuge in various countries at length settled in Feshat, opposite Cairo. Here the Sultan Salaheddin, in Jossuf Ben Ajub, took the learned Jew under his protection and the fame of Maimonides, as one of the most profound philosophers and learned physicians among the most

enlightened Jews and Arabians, grew to its height. At early dawn he used to cross to Cairo, where he was court physician, and on his return there were great crowds who came to consult him on questions medical, philosophical and religious. He writes his friend Samuel ib Tibbon, on leaving Cairo and arriving at his home in Feshat, "I find the ante-chambers filled with people, both Jew and Gentile, nobles and common people, judges and bailiffs, friends and foes; a mixed multitude, who await the time of my return. Patients go in and out until nightfall and sometimes even until two hours in the night. I converse with them and prescribe for them while lying down from sheer fatigue, and when night comes I am exhausted so that I can hardly speak." Häser mentions seven of his works: 1. *Tractatus de regemimi Sanitatis.* 2. *Aphorismi medici*, out of Galen's writings. 3. *Commentarius in Hippocrati Aphorusimus.* 4. *Libii niventi*, Hebrew medical and moral contents. 5. *Tractu de hæmorrhoidibus.* 6. *Tractus de cura eorum qui a Venenatus animalibus punctisunt.* 7. *De causis et medicis morborum.*

From the XIII. to the XVI. centuries the Jews played an important rôle in medicine in Spain. Their great effort enabled the translation of the best Hebrew, Arabic and Greek literature, into a condensation of Latin works.

After the edict expelling the Jews from Spain, among whom the Jewish physicians were also included, they sought refuge in Italy, France, Turkey and the Netherlands. What a political suicide this insane act on the part of Spain seems to us so far removed from those miserable days of the inquisition; still it was but the emancipation of science and free thought from the bonds of theological dogmas and doctrines. Spain, having lost in the Jew the elements of its industrial success and scientific activity, has shrunken from the magnificent splendor of its former self until now it is barely able to hold with its tyrannical hand the few colonies, striving for independence, remaining to it of all its former possessions.

On the other hand, as the seed scattered by the wind and falling on fertile soil sprouts forth, and grows with renewed vigor, so Jewish thought in more encouraging environments again asserted itself and we hear of the Jewish physicians of Spanish or Portuguese descent doing noble work in foreign countries for the advancement of medicine.

In Italy the Jewish physicians were always much respected for

their learning. I have noted on a previous page that one of the founders of the great school of Salerno was a Jew. As early as the XIII. century Häser mentions the Jew Ferraguth (Ferragius of Salerno) as the most important translator of Arabic writings into Latin. There were many Jewish physicians established there before the influx from Spain.

In many cases they enjoyed the friendship of popes and princes. Popes Julius II. and III., Leo X., Clemmens VII., and Paul III., had Jewish physicians. But often they were in attendance on popes or potentates who wrote bulls with restrictions, and oppressions against their people, and, in several instances, they were denied the practice of their chosen and honored profession among the gentiles. This was greatly due to the jealousy of fanatical monks; one in particular, Bernardin, of Sienna, traveled from city to city and injected wherever he could his poisonous and virulent thoughts against the Jewish physician. No misrepresentations were base enough, nor were lies small enough to portray before the eyes of the people pictures of horror and terror so great that they feared to call in a Jewish physician to the bedside of a dear one. One of the arguments used was that it was better to die than thank one's life to a Jewish physician.

The names of those in Italy who did so much for medicine are many. It is not my purpose to go too much into detail, but to present a sketch of the standing and work of the Jewish physician in those days of the middle ages. A few names may, however, be mentioned of Italian physicians worthy of note. The family of Porta De Leon are bright names in the history of medicine. Benjamin Porta De Leon was physician to King Ferdinand, of Naples. His son, Elieser, strove hard to walk in the footsteps of his illustrious father; a grandson, David Porta De Leon, who received a medical diploma at the University of Padua and who practised in Muatua, and his own son in turn, Abraham Porta De Leon, born in 1542, at first a rabbi, then theologian, but later one of the greatest physicians in Italy. He was one of the first who studied gold for its therapeutic value.

The Spaniard, Jehuda Abarbarnel, son of the finance minister under Ferdinand and Isabella, whose brother Joseph was also a physician, was a medical writer and poet of international reputation. Jacob Montino was also a celebrated physician of the period. He translated Averroes work into Latin. Besides these illustrious men there lived many others in Italy, one of whom

deserves especial mention. Bonet De Lates was born in 1498. He went to Rome, and after devoting many useful years to the study of astronomy, became body physician to Pope Leo X. Bonet De Lates is especially remembered by the Jews for his kind offices in saving the Hebrew prayer books from destruction, for in 1509 there lived in Cologne one Pfefferkorn, who sought notoriety by attempting to confiscate and destroy the Jewish prayer books. He thought that by this means Judaism might be exterminated for all time. For many years there waged a war of the pen between Pfefferkorn and Reuchlin, a learned man and translator, who referred the argument to Pope Leo X. Bonet De Lates used his influence with the Pope, and because of his advice, Pfefferkorn, the fanatic, was defeated.

In France the Jew in his medical practice underwent much of the dreary life history of his contemporaries in other lands of which we have spoken. The most renowned physicians were those who came to it as weary emigrants from Spain and Portugal in order that they might worship, without fear of the inquisition, the religion of their forefathers. In the XVI. century there lived Ely Montalto, physician to King Henry IV. Orabio De Castro lived in Toulouse as a new Christian (*Schein-Christ*). He earned the title of royal physician, but soon sickening of the hypocrisy under which he lived, wandered to Amsterdam, where he asserted his religion and enjoyed a lucrative practice. John Baptiste of Silva was born in Bordeaux and was a descendant of a Portuguese family. He studied in Montpellier and was physician to King Louis XV. and to the German Karl, duke of Bavaria. Fonseca, also a Portuguese, was a noted physician and friend of Voltaire.

As we will see later in its treatment of the Jew, though France was many times unjust it was the first nation to grant to him a most humane treatment. It opened to him its arms and said to him, "Thou art also my son."

In Turkey and the Netherlands there also lived many illustrious Jewish physicians whose ability and renown was no less than those of Spain, Italy and France. In the Netherlands Spinoza (1632–1671), whose father was a physician, by his philosophical writings did much toward removing the hindrances of free thought.

The Jews, as physicians, in Germany did less than in other countries. The hatred of the Jews was especially virulent there. Every crusade was accompanied by malicious accusation in order to excuse designs of pillage and plunder. The rabble were always

easily influenced for evil acts. Their anger and wrath once kindled the unhappy Jew became the victim of fire, sword and water.

The Jewish inhabitants were, like those of France, in a state of serfdom, dwelling in miserable huts, cut off from God's gifts to His children, sunlight and fresh air. They were huddled in the miserable ghettos (Judengasse), whence they could come out only at certain hours. Being recognised by a special sign of their servitude (called Judenfleck) they became victims of abuse from their fellowmen.

It was in such environments that the Jewish physician was to practise his profession. Many times they could minister only to their co-religionists. Their outward degradation worked inward on their minds, because confined to base and sordid occupations they contracted the thoughts and feelings to their station, and as the despised will become despicable, so the Jew, who had before written commentaries, cut off from the privileges of education and practice, often became a charlatan, wandering from village to village, but never remaining long enough to see a cure effected.

Despite these persecutions there are recorded many illustrious Jewish physicians, such, for instance, as Zedekiah. They lived in Nuremberg, Frankfurt, Berlin and Hamburg, and often received dispensations to live and practise without the pale of the Judengasse.

It was the philosopher, Mendellsohn, who paved the way for the development which physicians of the Jewish religion have made today. He had the Jew forget the Jewish jargon (a mixture of Hebrew and German), and learn the literature of the day at the expense of their Talmudic teachings. It prepared the way for that which followed, for when the French populace saw how the American colonists had founded their noble government, with its freedom of thought and religion, there was born in the cradle of their discontent the French Revolution, a war of the masses against the classes, full of such terrible historic scenes, but the people won their cry of liberty, equality and fraternity, and the Jew, for the first time in centuries, was recognised as a citizen and an equal. Napoleon I., in 1806, firmly established this right.

Since this time other civilised continental countries have also given to the Jew equal citizenship, and have opened to him schools and universities, so that Jewish medicine has, in our time, lost its identity, for it is a part of the medical history of his adopted fatherland ; so that when speaking of his works today we must

speak of him, not as a Solis-Cohen, Jacobi, Forchheimer, or Einhorn, a Jew, but as an American; not as a Bamberger, Kaposi, Neumann, or Politzer, a Jew, but as the Austrian physician; not of Israel, Klemperer, Senator, Oppenheim, Ebstein, or Mendelas Jewish, but German physicians.

REFERENCES.—Baas, History of Medicine; Häser, Geschichte der Medicin; Renonardo, History of Medicine; Roswell Park, An Epitomé of the History of Medicine; LeRoy Beallean, Israel Among the Nations; Dr. Richard Landau, Geschichte der Jndischen Arzte; Milman, History of the Jews; Remondino, Circumcision.

400 FRANKLIN STREET.

REPORT OF THE SPECIAL COMMITTEE ON REMEDIAL LEGISLATION IN REGARD TO EXPERT TESTIMONY.[1]

BY FREDERICK SEFTON, M. D., Auburn, N. Y.

YOUR special committee on remedial legislation in regard to expert testimony, appointed at the last annual meeting of this association, held at Rochester, October 20, 1896, instead of finding a dearth of material on which to frame a resolution for your action, has been favored with what might not inaptly be called a plethora of data. The amount of attention given the subject and the wealth of discussion it has provoked evidences the strength of disgust over prevailing methods, within the medical and legal professions at least, and the earnestness of intent to remedy the evils.

Out of the wealth of available material, it has been deemed expedient to embody in this report excerpts culled from some of the letters of the gentlemen of high standing in our own and the legal professions, who have kindly favored us with their view son this subject, and, in addition, to call the attention of our fellow members to the expressions of a few of the well-known writers, even at the risk of embodying quotations already familiar.

Hack Tuke, in his Dictionary of psychological medicine, says: "We find, at least as far back as the reign of Henry VIII., the courts were in the habit of summoning to their assistance, apparently as assessors, persons specially qualified to advise upon any scientific or technical question that required to be determined. Thus, on an appeal of maihem the defendant prayed the court would see the wound to see if there had been a maiming or not. And the court did not know how to adjudge, because the wound was new, and then the defendant took issue and prayed the court

1. Presented at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

that the maihem might be examined, on which a writ was sent to the sheriff to cause to come '*medicos chirurgicos de melioribus London, ad informandum dominum regem et curium de his quæ eis ex parte domini regis injungerentur.*'"

The English law of criminal procedure being litigious and not inquisitorial, the scientific expert was, ere long, placed in the position of an ordinary witness, subject to examination and cross-examination, and ceased entirely to exercise the function of an assessor to the legal tribunals. Our case-law contains many judicial deliverances, which it would be irrelevant to quote, and some of which do not deserve quotation, upon the untrustworthy character of medical expert evidence. The disrepute into which this class of testimony has fallen in England, appears to be due chiefly to historical causes, such as the persistency with which many medical witnesses, acting under a belief that their positions were or ought to be analogous to that of counsel, played the rôle of "medical advocates," the recklessness with which, in the opinion of lawyers, the plea of insanity and especially of moral insanity was set up in criminal cases, and, above all, the circumstances that have made the expert a witness instead of an assessor. The tendency which the legal profession displays to forget the triumphs and to remember only the failures of medical expertism, and the inheritance of witty judicial comments on the evidence of medical witnesses, which has come down to the lawyers of the present day from their professional ancestors, have done much to perpetuate a feud which is most inimical to the proper administration of justice.

Judge Doe, in State vs. Pike, 49 N. H., says: "When the authorities of the common law began to deal with insanity, they adopted the prevailing medical theories. The distinction between the duty of the court to decide questions of law and the duty of the jury to decide questions of fact, was not appreciated and observed as it now is in this state. Without any conspicuous or material partition between law and fact, without a plain demarcation between a circumscribed province of the court and an independent province of the jury, the judges gave to juries, on questions of insanity, the best opinions that the times afforded. In this manner, opinions purely medical and pathological in their character, relating entirely to questions of fact, and full of error, as medical experts now testify, passed into books of law and acquired the force of judicial decisions. Defective medical theories usurped the position of common law principles. The usurpations

when detected should cease. The manifest imposture of an extinct medical theory pretending to be legal authority cannot appeal for support to our reason or even to our sympathy."

In 1874, Professor John Ordronaux said: "There is a growing tendency to look with distrust upon every form of skilled testimony. Fatal exhibitions of scientific inaccuracy and self-contradiction cannot but weaken public confidence in the value of all such evidence. If science, for a consideration, can be induced to prove anything which a litigant needs in order to sustain his side of the issue, then science is fairly open to the charge of venality and perjury, rendered the more base by the disguise of natural truth in which she robes herself."

In the *Journal of Psychological Medicine* for October, 1851, Dr. Forbes Winslow is led to express himself as follows: "Surely it is the duty of the legal profession, if they differ from the views generally propounded by medical men, to respect their opinions, however opposed they may be to those which they themselves entertain. Sad will be the consequences, if, as the results of the injudicious and uncalled-for language of the bench and the railery and misplaced wit of the bar, the public should be taught to undervalue or think lightly of the evidence of the medical psychologist in cases involving the subject of crime and insanity, responsibility and irresponsibility." That such, alas! is the unhappy tendency of events we infer from the remarks which are said to have fallen from the lips of the Lord High Chancellor of England, as referred to in *The Lancet* for August 2, 1851. We quote the following passage: "During the recent hearing of a lunacy case, the Lord Chancellor (Justice Truro) is reported to have said: 'His experience taught him there were very few cases of insanity in which any good came from the examination of medical men. Their evidence sometimes adorned a case and gave rise to very agreeable and interesting scientific discussions; but, after all, it had very little weight with the jury.'" How very "up to date" all this sounds will appeal to the experience of every member of this association who has had much to do in our courts.

In Bannister's edition of Mental medicine, E. Régis, laureate of the medico-psychological society and of the faculty of medicine of Paris, etc., quoting from the Dictionnaire encyclopedique, in effect says: "Definition of expertise (*l'expertise*).—When in a civil or criminal suit the question of dementia is raised, men of skill usually are called in, either by the judge or by the parties,

sometimes to confirm, sometimes to refute the presumption or allegation of insanity. If the physician acts by virtue of a delegation of judicial authority he properly takes the title of expert; if his employment instead of being by the court is friendly and at the instance of the parties, he is a simple employé, not subject to the rules of the code of procedure. In the first case the written result of his investigations is called a report; in the second case, a consultation. Whichever way it is, at base the mission is the same, though different in origin; it tends to the same end and imposes the same duties. What applies to one, applies also to the other, in what we are about to say. First, what is an expert examination and what is an expert in the eyes of the law and in the sense of jurisprudence? Expertism is a method of instruction; its aim is to enlighten the judges in difficult, dubious or obscure cases and to furnish from special knowledge what they need in order to solve the question and make a definite judgment possible. The expert is a man of skill, charged with supplying these elements of the judgment.

"In Prussia, as well as in some other countries, the law makes it a duty of the court to call in the assistance of a medical legist to determine the mental condition of an individual. In France it is optional with the magistrates to order an examination by experts, either of his own motion or on the demand of the parties; they are the sovereign judges as to the expediency of this measure. The obligation to resort to experts is imposed upon the tribunals only in certain special matters designated by the law.

"The expertise necessarily presumes on the part of the judge, one or several definite questions addressed to the man of skill, and on his part an answer, a personal and reasoned opinion. The rôle of an expert in all its simplicity and clearly defined is: the expert is less than a judge; he is more than a mere witness: he differs from the first in that his decision has in it nothing imperative, from the second in the extent, the importance and the scientific character of his testimony. In no case should the medical expert step out of the boundaries of his proper attributes to usurp the rôle of an advocate, still less that of a judge. He should not pretend to interpret or apply the law and should be on his guard against making dangerous encroachments. Fixed animus and vain declamation fit ill in the mouth of a man who should speak exclusively in the name of science and verity. His language should be severe, cold, free from any artifice, disengaged from all interests and prepossessions. He

should work for but one end, to instruct the conscience of the judges and to provide impartial decisions for the court."

Judge Foster, in the course of a most able address, delivered before the New Hampshire medical society in May, 1897, declared : "It will be observed that the most frequent and most serious complaint concerning expert testimony is the want of agreement on the same subject and in the same case, among equally learned men, rendering their testimony uncertain (it is said), confusing and bewildering, to the extent that it is unreliable and of little value ; and, yet, I doubt if an intelligent, thoughtful and candid man can be found, who will not admit that, notwithstanding all its faults and imperfections, it would be impossible to get along without it."

And, further : "It is certainly true there are and always will be differences of opinion among experts of the highest character, 'rarely in regard to well-established facts, but often in regard to probable inferences from facts ; whilst entire agreement in matters of theory and speculation would be marvelous.' But concerning this alleged misfortune, it seems hardly becoming for the legal profession to indulge in severe criticism, since there is no profession so strongly characterised by differences of opinion upon every subject,—lawyers as well as judges constantly disagreeing and the latter not unfrequently overruling one another's decisions,—unless it be the clerical profession, the members of which, it may have been observed, are not entirely unanimous in their interpretation of the holy writ. Yes, it is a visible truth that doctors, as well as lawyers and ministers of the gospel, do disagree. It would be marvelous and deplorable if they did not. If there were no disagreement, investigation and experiment would cease and science, literature and art would sink to a dead level of stupidity and laziness. If scholars and learned men had come to a condition of unanimous agreement a hundred years ago, we should have had none of the marvelous discoveries and inventions—none of the magnificent victories and triumphs in medicine and surgery—that have distinguished and illuminated the closing years of the nineteenth century."

When speaking of proposed remedial measures, in the course of his address Judge Foster refers to the efforts that have been made in Massachusetts at frequent times during the last twenty years and particularly to the latest effort in attempted legislation in that state, which was in February, 1897, when the Massachusetts medico-legal society and the Boston medico-legal society joined in

the construction of a bill, which was urged before the judiciary committee of the house, but was not approved by that body. The bill provided "that the parties to any proceeding in court, before the trial, may agree upon an expert, who shall make such an examination of the case as may in his judgment be necessary and practicable, who shall give his written opinion thereon and shall attend the trial of the cause and answer such questions as may be put to him. If the parties do not agree, the court, or any judge in vacation, may appoint one or more persons learned in the branches of the science or medicine involved in the case. These persons, if more than one is appointed, shall confer and give their opinion in writing. If they do not agree they shall state in writing the points upon which they differ. If the parties do not agree, the court, upon motion of either party or upon its own motion, may appoint. The compensation of these experts shall be fixed by the court and paid by the county, but the defeated party shall refund the amount so disbursed. No medical expert shall be admitted to testify before any court, except as thus provided, and except in criminal cases, in which the defendant may call other medical expert witnesses, at his own cost, and in such case like witnesses may be called and examined by the commonwealth."

Dr. A. Walter Suiter, in a well-considered paper read at the forty-seventh annual meeting of the American medical association, cogently declared : "It is universally conceded, and justly so from the medical standpoint, that the present method of taking testimony requiring expert opinion is defective in the extreme and, in many instances, in practice absurd and ridiculous : attorneys, for example, taking advantage of the circumstances, frequently select and summon to the stand, to pose in the attitude of medical experts upon the gravest and most momentous scientific questions, members of the profession whose only special qualification consists in having agreed with their employer to express a satisfactory reply to the hypothetic statement, which supposedly covers the facts in the case at bar or under consideration. Herein lies the greatest fault in the prevailing system—namely, the absence of determining rules whereby the special qualification of the witness in a particular branch of medical science may be known and established beforehand, and the unlimited privilege which, in the usage of the courts, is possessed by attorneys and counsel to select for themselves, regardless of qualification, the witnesses whom they are to present as experts in a given case and who become *ipso*

facto the honest partisans of their employer, especially when he fixes their compensating fee. If reform in the presentation of medical expert testimony is ever to be accomplished, it cannot be by way of any change in the jury system of trial at present in vogue. It is much more possible that it will come through an improved and acceptable method of obtaining, and submitting for deliberation by the jury, the associated scientific facts and relations. In the judgment of the writer, the following propositions would seem to fairly comprehend the circumstances: (1) The appointment of a commission of experts by the court in each case requiring it, the experts to be especially qualified by educational experience as such. (2) The establishment of an educational curriculum and a period of service in each branch of medical science by which the qualifications of an expert witness may be known and certified. (3) Just and adequate compensation commensurate with the character of the service should be awarded and should, in every instance, in criminal cases, be paid from the public treasury upon the certificate of the presiding judge. In civil cases the compensation might or might not be fixed by the court, but should be taxed as costs to abide the event, or, by agreement, the expense might be equally divided between the contestants in the action."

Toward the close of his address, Dr. Suiter read the text of a bill which was introduced in the legislature of Minnesota in 1893, and which failed to pass. It was as follows: "*Be it enacted, etc.* Sec. 1.—In all cases pending in the courts of this state, civil or criminal, before or at time of trial of said cases, the judge of said court, when it is made to appear to him that the appointment of experts upon medical, scientific or mechanical questions is desirable, may appoint such experts to examine into the subject matter in controversy, said experts so appointed to be selected in reference to their impartiality between the contending parties; the number of such experts in each case to be fixed by the court. Sec. 2.—In all cases where experts are so appointed, the court is to fix their compensation and in all criminal cases direct the payment of the same in the same manner as witnesses on the part of the state are paid; in all civil cases the amount so fixed and determined by the court shall be taxed as disbursements by the successful party. Sec. 3.—The court may order such experts to examine into any medical, scientific or mechanical question, and after such examination to testify in court in reference thereto. Sec. 4.—The testi-

mony of said experts so appointed by the court shall be *prima facie* evidence of the statements and conclusions as to the questions in reference to which said testimony has been given. Sec. 5.—The court may also fix and determine the amount to be allowed such experts for and on account of any medical, scientific or mechanical examination, analysis or test, which the court may deem advisable to have made, and direct the payment thereof or permit the taxation thereof as costs, as hereinbefore provided."

With the kind permission of the Hon. William Rumsey, justice of the appellate division of the supreme court, the following paragraph from a letter written by that gentleman is quoted : "With regard to a board of medical expert examiners to be appointed by the government, it does not seem to me to be advisable. In this district, in a few cases that have arisen where it has been necessary to examine the mental condition of prisoners alleged to have been insane, we have found excellent results to follow from the appointment of a commission by the court. There are throughout the state now, in the different hospitals, a good many alienists of experience and approved ability and it is so easy to get them and the results of their examinations are usually so satisfactory, that I think it would be safe to depend upon that mode of procedure for ascertaining whether or not a man should be put upon his trial. Of course, you know that in the last result a man can never be finally acquitted of a crime until he has been acquitted by a jury and the only effect of appointing a commission to examine him is to decide whether or not he is in a situation to be tried. So long as nothing else can be accomplished, it seems to me that it would be hardly worth while to go to the expense of a standing board when the necessary information can be obtained so easily by the appointment of somebody who is an alienist and competent to conclude. At the same time I think that a very considerable improvement might be made in the present procedure and that the commissioner to be appointed to examine into the sanity of a criminal should be required to be an alienist. It would be very well, I think, if the duty were devolved upon the state commission in lunacy, for instance, to designate such persons in every district as were in their judgment competent to pass upon such questions and require the selection to be made from them."

Dr. Carlos F. MacDonald, professor of mental diseases, Bellevue hospital medical college, late president of the state commission in lunacy, etc., and a physician of exceptional experience in medico-

legal affairs, writes : "That the present method of obtaining medical testimony is not only imperfect, but is attended with serious evils,—evils which tend to bring the medical profession into disrepute with the public, the bar and the courts,—there can be no question. Such being the case it logically follows that there is need of reform in this matter and the question at once arises, how can that reform best be brought about ? The method which, as true physicians, we would naturally adopt in a case of this kind, would be to seek out the cause of the malady and then to endeavor to secure its removal by appropriate treatment. In looking for the causes of the evil complained of we shall not have far to seek. They will readily be found, first, in the usage of courts, which permits of the selection of experts by counsel on either side, without regard to their qualifications and standing, usually the only requirement being that the expert selected is willing to give his opinion in favor of that side of the case ; and, second, in the absence of any standard of qualification fixed by the medical profession as regards special study and experience in a given branch of medical science, which would, at least theoretically, render the would-be witness sufficiently skilled in that branch or subject to justly constitute him an expert.

"The first mentioned evil could doubtless be corrected by statutory provision, not for the appointment of a 'board of experts,' but for the selection of experts by the courts in each case ; and, while it might occasionally happen that a judge in selecting an expert would be influenced by other than meritorious motives, I think the courts could generally be relied upon to appreciate the responsibility attaching to their action in the matter and to endeavor to select only men of skill and repute in that particular branch of medicine, men whose opinions would be respected by the bar, the jury and the general public as well. Indeed, the very fact that the experts had been thus selected would tend to give dignity to their position and weight to their opinions. The experts thus selected should be permitted to have free access to all the evidence in the case, also to examine the plaintiff or defendant, as the case may be, and then to state their opinion, whether orally or written, subject to cross-examination, the cross-examination to be limited to the matters embraced in the opinion. Their compensation, if fixed by the court, whether at a rate per diem or by fee, should be sufficient to induce qualified men to accept such service. Experts selected and paid by such a method would be free from suspicion of being

biased in their opinions or influenced by pecuniary considerations, while the character and standing of those who would be likely to be selected would tend to establish confidence in their conclusions.

"Respecting the second evil, the cure for that lies in the hands of the medical profession itself—namely, to fix a standard of qualifications, based on special study and experience in a particular branch of medicine, which should entitle a member to rank as an expert in that branch, and at the same time putting its seal of disapproval and condemnation on the practice which now too frequently obtains of physicians posing as experts upon subjects respecting which they have no special knowledge or experience, relying upon their wit and the ignorance of opposing counsel and the jury to save them from exposure.

"It would doubtless simplify matters, if it were feasible, to provide that questions of expert opinion should be passed upon either by the court itself or by a jury composed of medical men, instead of, as is now the case, by a jury composed of laymen, many of whom are selected to serve in that capacity, at least in criminal cases, largely because they are lacking in knowledge and information of the matters upon which they are expected to pass. This practice, unfortunately, is one that cannot be abolished, for the reason that the terms of our federal constitution confer upon every citizen the sovereign right of trial by 'a jury of his peers.'

"Respecting the proposition to provide for the appointment of a board of examiners, either by the governor or the courts or by the commission in lunacy, it is my opinion that it would be neither desirable nor acceptable, either to the medical or legal professions or to the public, for the reason that it would savor of class legislation, which is against sound public policy. Furthermore, the prospective advantages through professional prominence and pecuniary gain, whether in fees or in salary, which an appointment on such a board would offer, would lead incompetent and unworthy members of the profession to seek appointment thereon through partisan or other questionable influences. Moreover, such a board, even if fairly representative in its make-up, would be a ready target for unfriendly or hostile criticism by their less fortunate brethren in the same line of practice, who might, whether justly or unjustly, regard themselves as being discriminated against. Then, too, it would require either a very large board or several boards to provide a sufficient number of experts in the various branches of medicine, including chemistry.

"For these reasons, it would seem to me that the most practical solution of the difficulty would be to make statutory provision for the appointment by the court of, say, from one to three experts whenever occasion arises, the law to provide that only physicians of repute in the particular branch of medical science to which the question for expert opinion relates shall be appointed, these experts to have full and free access to all the evidence in the case, as well as to the plaintiff or defendant, as the case may be, if the issue involves his mental or physical state and then to submit to the court for transmission to the jury a report in writing, setting forth their conclusion and the facts in evidence on which such conclusion is based; the cross-examination of the experts to be restricted to matters embraced within their direct statement of facts and opinion and the compensation of the experts to be fixed by the court.

"I am well aware that lawyers would raise objection to this manner of selecting experts, on the ground that a plaintiff or defendant in action is constitutionally entitled to the selection of his own witnesses and to call any witness whose testimony would tend to establish his case, a right which can neither be taken from him nor abridged short of an amendment to the constitution of the United States. To obviate this difficulty, counsel might still be permitted to call experts in addition to those selected by the court; though, it is safe to say, the opinion of the official or court-appointed experts would far outweigh any opposing opinion offered by experts selected by counsel.

"There is another point in connection with this subject which, in my judgment, should receive not only the attention of the committee, but of the society as well, for the reason that it is frequently a source of discredit to our profession. I refer to the unprofessional and, I may say, reprehensible practice of certain medical men—mostly pseudo-experts—acting as medical adviser to counsel and as expert witness in the same case. To observe, as I have often done, a medical man sitting at the elbow of counsel, actively engaged in taking notes and suggesting or preparing questions for the latter to put to the witness, also framing questions for the cross-examination of a fellow-practitioner and otherwise openly assisting the lawyer in his efforts to break down the opposing side, and subsequently taking the witness-stand himself for that purpose, is, to my mind, deplorable. If a physician is to appear as an expert witness, he should keep away from the lawyer in court and take no part in the conduct of the case which would put him

in the attitude of a biased or interested party. I think a resolution should be offered to the effect that it is the sense of the society that it is derogatory to the dignity of the medical profession for any of its members to occupy the position of medical adviser to counsel in any medico-legal case in which he is to appear as an expert witness."

Dr. P. M. Wise, late superintendent of the St. Lawrence state hospital, president of the state commission in lunacy, etc., in writing of the proposed creation of a state board of medical examiners, thinks "legislation should be obtained that will replace the present unworthy, unfair and unwholesome practice of seeking and using medical expert testimony with a proper system of medical examining boards and that the organisation of a permanent state board should not be left to either the governor or the legislature. The courts should have, solely, the appointing power, as the only public officers upon whom absolute dependence could be placed as to motives actuated by partisanship or political influences. They (medical experts appointed by the courts) should receive appointments in advance of requirements, in order to eliminate beyond question any motive that may be created in a given case by the excitement of feeling of the moment; hence, permanent state expert boards are desirable. As the same difficulties exist in other branches of expert testimony, as in questions of mental responsibility, this board should have representatives of each. Moreover, this board should be empowered to call witnesses under legal restrictions, independent of counsel, cross-examine witnesses and have all facilities placed at their disposal, even to the custody of the prisoner for observation, under such conditions as they may consider necessary. The well-known Snyder case, in Washington, D. C., a few years since, made an excellent illustration of the advantages of a board thus constituted and empowered. The German system of observation of prisoners offering a plea of insanity, in a hospital for the insane, illustrates the practicability of the second feature herewith recommended. The two should be combined, when justice, as concerns the question of responsibility for crime, could balance her scales. The importance of keeping persons who commit crime, as the result of a defective organisation, under life-long restriction, is sufficiently great to be recognised by law."

Dr. George F. Shrady, editor of *The Medical Record*, etc., anent the organisation of an expert commission, believes "the most

desirable plan of organisation of a commission of experts would be one that would make the commission, as such, entirely independent of the jury and give the said commission advisory power on all scientific questions. This advisory function could be exercised upon the judge, who could rule accordingly on all the purely scientific questions of fact. In order to have a reasonable representation of interests, it might be well for a commission of five to be composed as follows: one to be selected for each of the two sides and three to be named by the judge. It is obvious that no general commission could be large enough to compass all the questions involved in the difference and multiplicity of matters demanding special and expert knowledge. Therefore, it would appear more in keeping with the end to be obtained that each case should have its own commission appointed by the judge, as indicated."

Dr. Edward D. Fisher, of New York, writes: "I am in favor of some change of method in regard to expert testimony. In regard to one of the methods suggested, I am in favor of the appointment by the courts of a board of examiners. I would prefer our present method to any appointment, either by the governor or the commission in lunacy."

Dr. Samuel B. Ward, of Albany, touching on the legal difficulties to be overcome, writes: "The legal difficulties in the way appear almost insurmountable. The constitution of the state appears to guarantee to every accused individual the right to put on the stand any witness who can or will aid in clearing him and to cross-examine all witnesses. I was not aware individual rights were so sweeping when my paper (of 1889) was written. It almost seems now as if a constitutional amendment of some sort must be had before laws can become operative. Our only hope seems to lie in hammering on persistently in anticipation of eventually making some impression. Our cause is a righteous one and must finally prevail."

From the excellent article by Dr. J. B. Ransom, of Dannemora, written on a kindred subject and read before the medical society of the state of New York, February, 1895, we cull the following: "To my knowledge nothing consistent with an improved revision of the whole system of medical expert testimony has been undertaken. The question at once arises, by whom shall this needed reform be undertaken and to whom shall we look for a first movement in the right direction?

"If we listen intently, we may hear the indefinable mutterings of an arousing public sentiment in this regard and I firmly believe that the first indictment lodged by that most exacting of tribunals, an awakened public mind, will be against the medical profession and the courts will join hands with them in a mutual flagellation. The courts themselves have a way of avoiding such indictments unknown to us. Aside from this aspect of the case, there remains to us, as a profession, the much more important necessity of preserving our professional dignity and inspiring confidence in our integrity and ability. The testifying of medical experts to diametrically opposite views in a given case is not a spectacle calculated to enhance the prestige of the profession from any point of view or likely to increase the confidence of a critical public in the efficiency of our art. It then remains for us to act with promptness and determination and unite in an effort toward a change in this whole method of giving medical expert testimony.

"My own belief is that this whole system should be radically changed and the right to give medical expert testimony in any court in this state should be lodged in a nonpartisan state board, appointed by the governor and subject to approval by the senate. I will not presume upon your time, nor upon my legal acquisitions, more than to outline roughly what seems to me would be most likely to meet the requirements of the situation.

"This board should act in the capacity of instructors and advisers to the courts. It should consist of a sufficient number to provide amply for all criminal trials likely to take place at any time and should be subject to the call of the proper courts. The members of this board should be chosen from the ranks of our most expert alienists, men ripe in experience and judgment and having an ascertained qualification. The functions and powers of this board to be to examine with reference to the sanity or insanity of the accused and should, therefore, be empowered to call and examine any witnesses it may deem necessary, be they professional or lay. It should have access to all evidence throwing any light upon the case and it should also be provided that both prosecution and defense should, by showing reasonable cause, have the privilege of appealing to the courts for the calling of additional members of the said board, also to examine the accused, where the decision by the first experts called seems inconsistent. In no case should any physician, not a member of this board, be allowed to testify as an expert in insanity cases other than through the board itself and

in open court his evidence should be restricted to his knowledge of the facts in the case. The board should receive its remuneration from the state. If it should be urged that the creation of a special board by the state is unwise, there seems little objection to the designation of such a board from the ranks of qualified alienists already in the state service.

"I believe it is only through some such method of procedure that the whole system of giving medical expert testimony can be purged of its incompetency, venality, sensationalism and confusion and that a trained, thoroughly experienced and efficient class of medical experts can be secured. Thereby the ends of true justice can be most nearly meted out by the courts and the medical profession even here, as in other branches of its work, sustain the high position it so deservedly holds as a conservator of the human weal."

In the course of a brief address on Medical experts and expert testimony, delivered before the association at Rochester, October 19, 1896, Dr. Sefton, of Auburn, said: "With the rise in importance of this branch of our practice, with the increase in frequency of its employment as a means of avoiding juries, or of influencing the verdicts of juries and the decisions of judges, whenever avoidance has been deemed inexpedient or become impossible, it has been demonstrated to a conviction to all thinking professional men, legal as well as medical, that the accustomed methods employed in the production of lay testimony, or testimony as to facts, is unsuited to the proper development and presentation of this special class of evidence and that a radical change is necessary.

"After some time spent in interviews and in correspondence with physicians in different localities, I have found few medical men of experience and standing who have not on more than one occasion been irritated, often have been chagrined and at times humiliated by their experience in this line of work. Complaining justly that they never are permitted to state their findings to a jury in a logical, comprehensive manner, in a manner that would enable them fully and intelligently to embody all the essential medical facts in the case to the satisfaction of mind of the average juryman, but are bound down to 'yes' and 'no' replies to categorical questions, or forced in replying to utter trite commonplaces and well-worn, stereotyped definitions, excellent sounding things, and well enough standing alone, yet completely failing to convey their real opinions, in fact, any opinions, on the case immediately at

issue. Or, worse: forcing them, by limiting the scope of the answers, to appear to give an opinion opposed to what they know to be the truth, or one which, while in nowise affecting their conclusions from a medical standpoint, to a lay jury seeming to be a retraction, even a contradiction, of testimony previously adduced by them. Or when an explanatory sentence would effectually clear a cloudy point they are forbidden to make it, at least at the time; and if, further along in the case, so much of it as opposing counsel have agreed will not contravene the laws of evidence is hauled in, it comes haltingly, from a physician's standpoint emasculated of all power to make fecund with understanding the mind of the normal juryman.

"The existence of these conditions should make every one of us anxious for reform, and a reform that shall place the physician, as a witness in court, in the dignified position merited by the profession he has the honor to represent before a court of justice; that shall so restrict counsel in their dealings with experts as to make it impossible to frame an examination destined to parade a physician before court, jury and spectators as an interested, biased witness; one prone to exaggerate, eager to suppress facts against and to magnify out of all due proportions facts favoring the interests of the side in whose employ he chances to be and, necessity arising, willingly, even cheerfully perjuring himself for the sake of the remuneration promised.

"The medical expert himself: what shall be his qualifications? 'In France, in England or in Germany the courts would not recognise as an expert alienist a physician who had not had at least several years of experience in special practice and study among the insane. Here, the ease with which anybody who wishes to call himself an expert may impose upon courts and juries is astonishing. His right to be considered so is never questioned. This is the reason that experts are so readily found who will swear that a sane man is a lunatic, that a notorious lunatic is in sound mind and all his delusions facts, that a man conducting his affairs perfectly has paresis and epilepsy and that another who clearly has paresis is capable of attending to his business as usual.'

"A daily New York newspaper says editorially: 'The evils of pseudo-expertism must be indeed far-reaching when the organs of the medical profession are called upon to rebuke it. There is a prevailing lack of belief in experts nowadays among laymen, judges and juries. It is evident there must be a radical reform of

some kind before the testimony of expert alienists in any given case can be accepted as always candid, honest and scientific. So long as any physician can pose as an expert if he thinks it profitable, so long as lawyers from either side may summon experts prejudiced in their favor by promise of payment for testimony in behalf of one side, just so long will expert opinions be received with incredulity and perhaps with contempt and ridicule by the public and by the juries. The medical profession owes it to itself to see that the law regarding the manner of selecting experts is changed and to repudiate all sham pseudo-experts.'

"A law might be framed compelling every physician presenting himself to the court as an expert, to prove he possesses special qualifications for the work. First, that he is a regularly graduated physician and in good standing. Second, that he has had at least five years' practical experience along the particular lines presented in the case about to be the subject of judicial investigation.

"A justice of the supreme court of the state and a number of lawyers have informed me it was the determination of many members of the bar to agree to employ but two physicians, one for each side of a case, to limit expenses and minimise chances for confusion. Such a measure is not remedial. It fails to take cognisance of, to our profession, the worst features. It fails to secure to the physician adequate opportunities for a proper physical examination of the patient. It still permits counsel to throttle the physician on the witness stand as often as the exigencies of his side of the case may seem to demand.

"It has been suggested that a law be enacted 'requiring the appointment by the judge, of a commission of one to three experts to examine and report to him upon any medical question arising in the case.' Such a change might be an improvement on existing methods, yet several objections at once suggest themselves to the mind. There would be danger that such an act would give rise to a set of court favorites composed of political doctors, so-called. If not, the difficulty of making a proper selection would be great; 'for by what means would the judge be enabled to distinguish the true expert from the false?'

"A law might be passed compelling opposing counsel to meet and unite in choosing a single expert as now they choose a referee. Such a law would have many advantages. Still, from the nature of the evidence demanded of an expert called upon as he is, not only for a statement of facts, but for conclusions based on those

facts, he would be almost invariably at variance with one of the counsel, and be placed in as awkward and disagreeable a position as under the present methods. Besides, it might happen in important cases that it would be difficult, perhaps impossible, to secure a competent physician who would be willing to assume the responsibilities of the case alone. And there is wisdom, as well as safety to the doctor in numbers.

"Each counsel might be compelled to present the names of three competent practitioners to the court, whose duty it should be to select one name from each side, and to add a third of his own choosing, the third not to be one of the original six; the three selected to constitute a commission, to whom every possible facility should be given for making a thorough scientific examination of the patient, even permitting them to summon and examine witnesses if necessary; counsel on both sides to have free access to the commission for purposes of consultation; the commission to make a full report in writing to the court, and at the trial to testify in open court; the examination and cross-examination by counsel to be limited in its scope to the specifications contained in the written report in the hands of the presiding judge."

Believing it to be unnecessary to consume more of the time of the association, particularly in view of the fact that all procurable testimony is in accord with what precedes, and, if read, could scarcely strengthen what has been so clearly and forcibly demonstrated—namely, while your committee has met with not one dissentient voice in advocacy of a change, the expressed opinions as to what the change shall be have been many and variant. The greatest difficulty seemingly is to formulate a resolution that in no particular shall contravene or trench on the rights of the individual as guaranteed by the constitution of the state.

With no further preamble your special committee respectfully submits the following resolution for your consideration, believing, that while they are not ideal in their demands, because it would be useless to ask of the state legislature, at this time, the enactment of a law which should embrace in their entirety those reforms we all believe would fully represent the advanced state of our art, they yet contain material for much thought, and embody the nucleus of an advance on existing methods.

Resolved, That the Medical Association of Central New York, believing that medical expert testimony is falling rapidly into disrepute; that because of the methods pursued in the introduction of his testimony

the medical expert often stands for rumor, for guesswork, for sensationalism, for partisanship, for newspaper notoriety,—instead of for study, for observation, for science, for justice and for professional tradition,—would recommend the enactment of a law by the legislature of the state, providing that hereafter no one shall be permitted to testify as a medical expert in a court of law unless possessed of a certificate issued by the regents of the University of the State of New York to the effect that he is of good character and professional standing ; that he is at least thirty years of age ; that he has had at least five years' special experience in the particular branches in which he desires to stand as an expert ; that he has passed a regents' examination in such branches before the issuance of the certificate ; that the certificate, when issued, shall be recorded in the county clerk's office where the holder resides ; that medical experts shall be selected by the method at present in vogue in the courts in selecting referees ; that their number shall be limited to two for each side of the case ; that they shall have full access at all proper times to the person of the party to be examined and to so much of the testimony as may bear on his physical or mental condition, or both ; that persons suing *in forma pauperis* shall have the benefit of a medical expert appointed by the court, placing thereby the medical profession on the same level as the legal in regard to such unfortunates ; that a fee for a medical expert shall be fixed by statute and be taxable in the bill of costs, this provision, possibly, not to prevent private agreements for a compensation in addition to such stated sum ; that the testimony of any medical witness called by either side to an action, not holding a certificate in accord with the above restrictions, shall be confined to evidences of fact.

In concluding, your committee wishes to record its appreciation of the courtesies extended it by the gentlemen whose views on this important subject are outlined above ; to others for interesting data ; and especially to Dr. J. B. Ransom, of Dannemora, for the loan of correspondence, and to J. M. Brainard, Esq., of Auburn, who as of counsel for the Lehigh Valley Railway Company has seen much of medico-legal work, for valuable suggestions.

Respectfully submitted,

Frederick Sefton, Auburn, N. Y., Chairman.
Alvin A. Hubbell, Buffalo, N. Y.
Nathan Jacobson, Syracuse, N. Y.
William S. Ely, Rochester, N. Y.
Henry L. Elsner, Syracuse, N. Y.

Special Committee.

A QUICK TEST FOR THE VISUAL AND COLOR FIELDS.

By EUGENE N. S. RINGUEBERG, M. D., Lockport, N. Y.

THE determination of the visual and color fields, while of great importance, is at times apt to be neglected on account of the time involved in their examination, even when made with a Claiborne rod with interchangeable balls or with different colored discs of paper. Furthermore, have found that there is apt to be quite a source of error due to the state of expectancy on the patient's part of seeing a certain color which he knows to be in the examiner's hand and will often call the color before he can accurately see it. Of course, we can occasionally change the color and so, to a certain degree, correct our observations, but this all takes more or less time and trouble.

To obviate these difficulties and to give the busy oculist an opportunity to determine approximately the visual and color fields

INSTRUMENT TO DETERMINE VISUAL AND COLOR FIELD.

as frequently as he may deem necessary, I have devised a little, simple instrument, which has been found very satisfactory for making a quick and approximately accurate test. This consists of a block of light wood, with three equal faces of 2 c.m. square, each ace being of a different color—red, blue and white respectively, care being taken to have the red and blue of nearly equal intensity. This block is mounted on a light rod. Its utility is at once apparent, as it will be seen that any of the colors can at once be brought forward by a very slight rotation of the rod between the thumb and finger holding it, without altering the position of the hand, or in any way giving the patient warning that a change has been made and a quite accurate idea of the size and shape of the color fields can be formed in a very few moments.

E. B. Meyrowitz, of New York, has undertaken to make the instrument, a cut of which is appended.

THE average man takes five and a half pounds of food and drink each day, amounting to one ton of solid and liquid nourishment annually. In seventy years he eats and drinks one thousand times his own weight. —*Ladies' Home Journal.*

Clinical Report.

A CASE OF POST-MORTEM CESARIAN SECTION.[1]

By FRANCIS E. FRONCZAK, A. M., M. D.,
Visiting physician and surgeon to the Felician Sisters' Institute, Polish Orphan Asylum and Home for Old and Disabled at Cheektowaga, N. Y.

IT DOES not often fall to the lot of a physician of but few months standing to be called upon to perform a Cesarian section delivery, this method being one of the rarest in obstetrics. I trust, therefore, it will be of sufficient value to interest the members of the Academy.

On November 13, 1897, at three o'clock A. M., I was summoned to to attend, according to the statement of the messenger, a case of unconsciousness in child-birth.

The patient, Mrs. A. K., 31 years of age, mother of seven children, all delivered comparatively easily, with no evil after-effects, was lying crosswise in bed. She was cyanosed, breathing stertorously, with eyes unequally dilated. I noticed that only the upper half of her chest was moving. The midwife informed me that she was called to attend the woman in confinement, but that no labor pains were in evidence at any time. Her pulse could hardly be found and the heart-beat was irregular and weak. I at once made an injection of strychnine and later of atropine.

Enquiring into the history, I found the patient expected to be delivered in about six to seven weeks, that she became ill the day before about mid-day, suffering from headache and general malaise; at six in the evening she became worse and went to bed, at eleven she complained of pain in her abdomen, of inability to breathe, of a sensation as of choking, and that her left arm was very lame, and she was afraid she was dying all this time. At midnight she became unconscious and began to breathe in a loud, snoring-like manner. A midwife was sent for; when she arrived she pronounced it to be a case of labor without the labor pains, or a condition something like it, and she advised to watch the patient. Her attendants did watch her until she had a convulsion and her limbs began to turn cold, whereupon I was summoned. I was also informed that the patient was washing all the day before and had also fallen down stairs, striking on her head.

I now examined the woman thoroughly; her pulse was a little stronger, her heart beat sixty times per minute, but she continued to breathe only with the upper half of her chest, the diaphragm being perfectly quiet. No labor pains were noticed, the os was closed, the fetal

1. Read before the Buffalo Academy of Medicine, Section on Obstetrics.

movements could be seen occasionally, and the fetal heart-beat was 124. I at once ordered hot applications to her extremities, and hot bricks placed in the bed. Though the woman had a movement of the bowels early in the evening, I began to make preparations for a lavage of the lower bowel. The heart respiration failing, I injected glonoin and more atropine and morphine. The pulse improved only for a very short time. The respiration being now very shallow, I saw that the patient would not last very long and explained to the relatives that her condition was extreme, that the child in the uterus was alive, and requested to be permitted to deliver it per abdomen in case the mother should die, which was expected almost every moment. They flatly refused. Again and again I injected glonoin and atropine to support the constantly failing heart and respiration. It was all in vain, however, the patient sank rapidly, and died about an hour and a half after my arrival. I listened to the fetal heart sounds: they could be heard but feebly. Again I asked permission to deliver the child by abdominal section, and again I was refused.

I started to go away, when some one of the family thought it would be well for the child to deliver it in the manner proposed, if for no other purpose than for the performance of the baptismal rite. I was called back when but a few feet from the house and told to proceed. I listened to the fetal heart again and I could hear it plainly. Quickly I spread a yard or two of cotton, seized a scalpel, and made an incision, beginning about an inch below the umbilicus, and continuing for about four to five inches downward toward the pubes. There was about a quarter of an inch or more of subcutaneous adipose tissue to be cut through, and the abdominal muscles at their junction at the linea alba. When the uterus was exposed, the fetal movements could be noticed. I opened the uterus with one long incision. But little blood appeared, followed by a gush of amniotic fluid. I pulled the child from the uterus; it breathed but faintly, and its limbs made a convulsive movement or two. I wrapped it quickly in the cotton, tied the cord and cut it. I saw, however, that the child's face was cyanosed and that I would have to resort at once to artificial respiration. I did so, using Schultze's method, and also the method described lately in *Pediatrics*, in which the child is laid on its back, the operator putting one hand on the chest and taking hold of the legs with the other, alternately raises them over on the abdomen and presses the chest, thus bringing about inspiratory and expiratory movements. I labored hard and earnestly, but the child lived only a very short time. It was a female, fully developed, weighing about seven pounds, and in the uterus it was a vertex presentation.

The question may now be asked, to what was the mother's death due? It might have been angina pectoris, it might have been some injury sustained by the fall, this injury interfering

with the movements of the diaphragm. Finally, eclampsia also claims our attention. Each of the above-mentioned conditions had its characteristic symptoms, each in itself a sufficient cause of fatality. The child's death no doubt can be attributed to asphyxia, due to carbonic acid gas generated in the mother's system, as the respiration was not sufficient to fully oxidise the maternal blood. Finally, was I justified in performing Cesarean section ? I think it was my duty to perform this operation in view of the child's signs of life. It is, I believe, the conviction among the medical profession and even among the educated laity, that to deliver a possibly living child from its dead mother's uterus is justifiable. In Austria, I understand, there exists a law that a child should be delivered through abdominal section at its mother's death.

508 Fillmore Avenue.

GANGRENOUS INTESTINE—RESECTION—ANASTOMOSIS WITH THE MURPHY BUTTON—RECOVERY.

By FRANK A. JONES, M. D., Rochester, N. Y.

I WAS called July 16, 1897, to see Mrs. S., a widow 27 years of age, mother of one child, of previous good health. She was suffering from very severe pain in the right iliac region, with very little, if any, distension noticeable, very slight tenderness on pressure, pulse and temperature normal. Bimanual examination disclosed a mass about the size of an orange, which I concluded was an enlarged ovary. Bowels were regular and menses normal. Large hypodermics of morphia were required, and at times it became necessary to administer chloroform. The following morning she was so much improved that she walked to the bath-room. Pains increased by night, however, and her pulse became accelerated, temperature now 101°, nausea and vomiting present, abdomen distended. I had her removed to the hospital, where, on the 18th of July, after due preparation, she was put under chloroform, and on opening the abdomen I found a cystic tumor of the right broad ligament which had ruptured at the pedicle, filling the abdomen with blood and clots ; this was ligated and removed, abdomen was thoroughly cleansed and closed. She made a good recovery and returned to her home in four weeks, and in a short time was well and strong, assisting with the house-work. And after a long walk on October 2d was suddenly seized on the morning of October 3d, at five o'clock, with pain of the same severity on the left side, on a line with the umbilicus. Nothing could be made out by vaginal or rectal examination, bowels had been moving freely up to the day previous, since which time

there had been no evacuation nor gas. Large enemas were given with no result. It was simply impossible to keep her comfortable without chloroform. Pulse and temperature were normal, no nausea, no vomiting, no regurgitations, very little distension or tenderness on pressure. This condition continued until the following morning, when I was called, and found her apparently in a collapse, no pulse at the wrist, respirations very rapid, skin cold and clammy, absence of pain, eyes sunken, face pinched, and, all in all, a complete picture of despair. Abdomen was now distended and tympanitic. Strychnia, nitro-glycerine and brandy were used hypodermically, also infusions of salt solution under the skin in immense quantities. She began to rally about noon and at four o'clock, everything having been prepared for an operation, she was placed upon the table, pulse at that time very feeble and about 180. A small amount of chloroform was administered when I cut down through the old incision and found a large mass of gangrenous small intestine. As rapidly as possible this mass was removed and anastomosis made with a medium-sized Murphy button. The abdominal toilet was completed as soon as possible, a drainage-tube introduced and abdomen was closed with silkworm-gut sutures and patient placed in bed. She rallied at once after being placed in bed, suffered from no shock, no vomiting, pulse dropped to 128 in less than twenty-four hours, bowels moved, a large amount of gas was expelled, and they continued to move freely from one to four times each day. It was found by actual measurement that thirty-two inches of small intestine had been removed. Pulse fell to 80, temperature normal, which had never exceeded $99\frac{4}{5}°$. She continued to improve from day to day and the button was recovered on the fifteenth day. She then made an uninterrupted recovery, and is now, after two months, able to attend to her household duties.

155 Lake Avenue.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Annual Meeting, held January 11, 1898.

Reported by F. C. GRAM, M. D., Secretary.

THE Medical Society of the County of Erie held its seventy-seventh annual meeting, Tuesday, January 11, 1898, in the rooms of the Buffalo Academy of Medicine, 619 Main street.

The President, Dr. Lucien Howe, called the meeting to order at 9.45 a. m. The minutes of the semi-annual as well as those of the special meeting held to take action on the death of Dr. Edward Storck were read, the former in their entirety and the latter by title only, after which they were approved.

The PRESIDENT thereupon re-appointed the business committee, consisting of Drs. E. H. Long, E. C. W. O'Brien and S. A. Dunham.

Dr. WILLIAM WARREN POTTER, chairman of the committee on membership, reported favorably upon the names of the following candidates for membership and recommended their admission to the society : Drs. Renwick R. Ross, Henry M. Reinhardt, Julius Ullman, Lorenzo Burrows, Katharine S. Munhall, Mary M. Huntley, Edward M. Dooley, William Preiss and D. J. Constantine. The report was adopted and the applicants were thereupon duly elected.

Applications for membership were received from Drs. Christ A. Weinbach, James W. Charters, Francis E. Fronczak, Charles R. Borzilleri, Carro Julia Cummings, E. McC. Pomeroy, N. L. Burnham and John J. Finerty. Referred to the committee on membership.

The treasurer, Dr. EDWARD CLARK, submitted his annual report as follows :

Cash on hand as per report for 1896	$ 199.38
Dues received in 1897	332.12
Total resources	$ 531.50
Total disbursements during 1897	270.23
Cash on hand January 1, 1898	261.27
	$ 531.50

The report was referred to an auditing committee, consisting of Drs. Thompson, Preiss and Wetmore, which later announced that the account and vouchers were correct.

The SECRETARY stated that in compliance with the request of the society at the semi-annual meeting, the president and himself had taken the necessary steps to re-incorporate the society, and read the following letter from the attorney who had been intrusted with the work :

BUFFALO, N. Y., August 3, 1897.

FRANKLIN C. GRAM, M. D.,

Secretary of the Medical Society of the County of Erie, Buffalo, N. Y.

DEAR SIR—I beg to advise you that the certificate of incorporation of your society was filed in the office of the Secretary of State at Albany on July 29th last, and that the society thereupon became duly incorporated under and by virtue of the laws of the State of New York.

The society retains its original name—Medical Society of the County

of Erie—and by that name is capable of maintaining and defending any action or proceeding in all courts and places, and may hold for its own use any real or personal property, including a medical library and apparatus. No change occurs in the management of the society, all officers, censors, and the like, holding over until the next annual election, when their successors shall be elected as has been customary. Regarding the seal, I would suggest that you adopt one pursuant to our conversation of a few days ago.

Yours truly, PETER MAUL.

The suggestion regarding the seal was to the effect that it contain the statements, "organized, 1821, re-incorporated, 1897."

The communication was received and filed.

The following correspondence was then read by the secretary:

ANDREW LANGDON, ESQ.,

President Buffalo Historical Society,

MY DEAR SIR—About two years ago I had a conference with you in relation to leaving certain books and documents belonging to the Medical Society of the County of Erie in the care of the Buffalo Historical Society, but no action was taken at that time.

This society was organised seventy-seven years ago. Our old minute books are becoming valuable, and one has even been lost. We are now making a collection of autobiographical sketches, and of photographs of members, which, when completed, will number between 300 and 400. At the request of the president, Dr. Lucien Howe, I desire to ask if the Buffalo Historical Society will act as custodian of these documents, and the like, permitting our members access to them and allowing the Medical Society of the County of Erie to reserve the right of removing the collection if it should so decide at a future date, which might become desirable in case this society secured a permanent home.

Respectfully yours,

FRANKLIN C. GRAM, *Secretary.*

The reply received was as follows:

DR. F. C. GRAM,

Secretary Medical Society of the County of Erie.

DEAR DOCTOR—The Buffalo Historical Society will receive, and act as custodian of, the minute books, biographical sketches, portraits, and the like, belonging to the Medical Society of the County of Erie, under the conditions mentioned in your favor of the 6th inst., viz.: that the same shall be deposited with the historical society and remain in its custody until such time as the medical society shall direct otherwise. Individual members shall have access to the same whenever the rooms

are open to the public, but neither the collection nor a part of it may be removed except by vote of the medical society. I would suggest that you place the collection in an appropriate case.

Very truly yours,

ANDREW LANGDON, *President.*

On motion, the offer of the Buffalo Historical Society was accepted, and the president authorised to appoint a committee to make the necessary arrangements for the transfer. The president named for such committee, Drs. Gram, Wyckoff and Stockton.

An invitation to attend the annual meeting of the Historical Society was accepted.

Dr. Eli H. Long, chairman of the business committee, presented the program for this session as prepared by the committee.

A committee on nominations was appointed by the president as follows: Drs. Ira C. Brown, W. W. Potter, McPherson, Thornbury and Congdon.

The president called vice-president Coakley to the chair while he delivered his annual address, entitled "Reasons for a law making Credé's method for prevention of ophthalmia of infancy obligatory in public institutions."

On motion of Dr. H. U. Williams, a committee consisting of Drs. S. W. Wetmore, Thornbury and B. G. Long, was appointed to act on the recommendations contained in the address, and on motion of Dr. Dwyer a vote of thanks was tendered the president for his admirable address. Later in the session the committee on the president's address submitted the following report, which the society adopted:

We, the undersigned, a committee appointed to act upon the recommendations for legislation concerning prevention of ophthalmia neonatorum, as set forth in the president's address, do hereby recommend that the President of the Medical Society of the County Erie be authorised personally coöperate with our representatives in the legislature, at Albany, and associate with himself two other members of the society, to constitute a committee, and that every reasonable effort be made to secure enactment of the legislation as set forth in the president's address.

Signed, S. W. Wetmore,
Frank J. Thornbury,
Ben. G. Long.

Dr. J. B. Coakley, chairman of the board of censors, submitted the following report:

To the Medical Society of the County of Erie:

The board of censors respectfully presents you with its semi-annual report for the six months ending today as follows:

During the past year the City of Buffalo has been infested with an unusual number of medical quacks and charlatans. All reported cases of this nature have been carefully investigated by this board and several of these illegal practitioners, after having been admonished, have left the city without further trouble. Several cases have been laid before the district attorney by this board, with such evidence as could be procured, but in no case, we regret to say, has there been an indictment found by the grand jury. We cannot but feel that this result might have been different had there been more hearty coöperation with us on the part of the district attorney.

In several of the cases of nonregistered practitioners professing to cure diseases by external applications laid before him, the district attorney decided not even to present the evidence to the grand jury, on the sole authority of a decision rendered by the general term of the supreme court in the case of Smith vs. Lane, reported in 24 Hun, page 632, wherein it was laid down that "Chapter 436 of the Laws of 1874, declaring it to be a misdemeanor for any person to *practise medicine or surgery*, who is not authorised so to do, by a license or diploma from some chartered school, and the like, does not apply to one who undertakes to cure diseases by manipulating the patient's body by rubbing, kneading and pressing it." This case was decided in 1881, since when the medical opinion on the subject has greatly advanced and a new statute, Chapter 398 of the Laws of 1895, has gone into effect. This case besides was never carried to the court of appeals. The courts of other states, notably those of Kentucky, have applied a much wider and broader definition to the term "the practice of medicine." In a very recent case in the latter state, the practice of medicine was defined as follows: "Any person who for compensation, professes to apply *any science* which relates to the prevention, cure or *alleviation* of the diseases of the human body, is practising medicine within the meaning of the statute."

We cannot but believe that the highest court of this state would apply as broad a definition as the Kentucky court, were a case properly brought before it. We urge upon this society at this time the propriety of taking all steps in its power toward the settlement of this very interesting and important question of the construction of the statute of our state specially designed for the prevention of the illegal practice of the healing art, and which in the opinion of this board clearly covers the cases hereinafter enumerated.

It cannot be that the state of New York, with its splendid system of medical education and strict examination for license to practise, will prove itself incompetent to protect its citizens from quackery. The

board of censors desires the coöperation of every member of the county society in its efforts to drive out from our midst all forms of the irregular practice of medicine.

As an illustration of what may be accomplished by a combination of proper vigilance and official activity, we may cite the results obtained by the New York county medical society. Within two years after the passing of the law of 1895 against quacks, that society caused the arrest of eighty-three persons for the illegal practice of medicine and obtained convictions in fifty-one cases. These persons paid in fines the sum of $3,690.00 to the society making the complaint, a not inconsiderable source of income following, as a reward, for the strict performance of duty. The New York society further has a large number of cases pending.

If we have the coöperation of our district attorney in the coming year, we feel that a like creditable showing may be made for Erie county. However, unless this society continues a relentless war against these evils, the signs point toward this county's being considered a harbor of refuge for quacks and charlatans driven out from other states, where laws are not only strictly framed, but also strictly enforced.

We present herewith a list of cases investigated, with a statement of the action taken in each as follows :

G. H. A. Schaefer, No. 8 Grey St.—This man does a large advertising business, particularly in an electrical treatment of diseases. He is not registered. The attention of the district attorney was called to him last spring, but no action has yet been taken. Mr. Schaefer has been visited personally by a member of this board and warned to discontinue this practice.

Mrs. Judith Matteson, No. 248 North Division St.—She is the well-known clairvoyant and has never been registered. She was consulted and had charge of the case of one Matilda Limbach, who died on January 28, 1897. We have testimony showing that she prescribed certain medicines *to be taken internally by this patient.* This case was referred to the district attorney, with the evidence mentioned, but action was refused to be taken upon the sole authority of the case of Smith vs. Lane, above referred to. Under the state of facts, which we offered to prove, to-wit : that medicines were prescribed for internal use, we cannot see how the Smith case applies in any way whatsoever.

During the early autumn Buffalo was visited by one Herr Fritz, who advertised himself as "the great modern healer." He was visited by this board and admonished that he was violating the laws of the state, and after a few days' stay left the city. He had previously been driven out of Pennsylvania in like manner.

Theodore F. Vogelgesang, 30 Adams street.—This party does a large advertising business, making a specialty of the application of liniment in diphtheria and rheumatism. These facts can be clearly proven, and

were laid before the district attorney, though no action has yet been taken. The doctrine of the Smith case, it seems to us, cannot be held to have any more application to the case of this illegal practitioner than to that of Mrs. Matteson.

The case of Dr. Antonio Sciarrino is one of nonregistration in this state, although he claims to have a regular diploma granted in Sicily. We are in receipt of a letter from the regent's office, at Albany, saying that it is necessary for such a practitioner to be registered in this state, thus corroborating our understanding of the law. This communication, together with the statement of several witnesses, who will prove that Dr. Sciarrino is in active practice at No. 252 Terrace, was laid before the district attorney, but all papers have been returned to us, by him, without action.

In closing our report we, regretfully, are obliged to present a case of the violation of professional ethics by a member of this society.

Dr. ——— * * * * a member of the medical society of the county of Erie, has been for some time engaged in widespread advertising, by means of circulars distributed from house to house, and in practising the cure of rupture by means of a secret method known as "The sac lactic method." Dr. ——— is thus violating two sections of the code of medical ethics of the American medical association, to-wit: Sections 4 and 5 of article I, relating to "The duties of physicians to each other and to the profession at large," which forbid a physician (Sec. 4) to resort "to public advertisements, or private cards, or handbills inviting the attention of individuals affected with particular diseases;" and (Sec. 5) "to hold a patent for any surgical instrument or medicine; or to dispense a secret nostrum, whether it be the composition or exclusive property of himself or of others."

The facts in this case can be abundantly proved, and Dr. ——— told a member of this board, personally, that he cared not what action the medical society of the county of Erie might take with reference to him.

Very respectfully,

J. B. Coakley, *Chairman*,
Irving W. Potter,
Thomas F. Dwyer,
Charles E. Congdon.

Dr. Wyckoff moved to receive the report.

In seconding the motion Dr. W. W. Potter said that the report was thorough and clear, making definite statements that ought to be acted upon. The censors ought to be supported by this society in their efforts to rid the county of itinerent, advertising and all illegal practitioners of medicine.

Dr. Hopkins thought it proper to receive this report as this

society had a history in this matter. It touches upon a subject of the most vital interest to its members, viz.: what constitutes the practice of medicine?

Dr. COAKLEY stated that a report received by him from the New York society showed that convictions can be obtained under the law as it stands. That society employs an eminent attorney, and as the fines go to the society the costs are more than covered. Some cases have been carried as far as the court of appeals. The report shows that there have been 124 arrests under the new law, with 74 convictions and 12 cases pending.

On motion of Dr. HOPKINS the censors' report was referred to a committee of three to make recommendations at this session. The chair appointed Drs. Hopkins, Potter and Hoyer.

Later this committee submitted the following, which was adopted:

To the Medical Society of the County of Erie:

Your committee to consider the report of the censors begs leave to submit the following:

While the entire report is to be commended, we deem it our more specific duty to recommend the society to grant authority to the censors to employ an attorney, with a view to the prosecution of illegal practitioners of medicine in the county. The district attorney's office appears to be indifferent to this class of work; if this be true and this society expects to obtain convictions it must be at the hands of a special attorney, employed and paid by the society.

The present law seems to be adequate to obtain convictions in the County of New York, and there would seem to be no good reason why it should not be enforced in the County of Erie. Your committee suggests that for the present the expense incurred by the censors for this purpose be limited to $200 for the year 1898.

All of which is respectfully submitted.

HENRY REED HOPKINS, *Chairman.*
FREDERICK F. HOYER.
WILLIAM WARREN POTTER.

Dated Buffalo, January 11, 1898.

The report of the censors was thereupon received and placed on file.

The PRESIDENT called attention to the death of an honorary member of this society, Dr. W. S. Tremaine, and recommended suitable action.

Dr. POTTER moved that a committee be appointed to prepare a

memorial. The motion was adopted and the president appointed Drs. Potter, Wyckoff and Thomas Lothrop.

Dr. Roswell Park moved that when the society adjourns it be until 3.30 p. m., in order to give members an opportunity to attend the funeral services, which are to occur at 2.30 p. m. on the same day. Motion adopted.

The committee subsequently reported the following, which was adopted :

IN MEMORIAM.

Surgeon William Scott Tremaine, U. S. Army (retired).

Dr. William S. Tremaine died at his home 410 Elmwood avenue, Buffalo, Sunday evening, January 9, 1898, in the sixtieth year of his age. He was born at Charlottetown, Prince Edward Island, Canada, September 13, 1838, went to Boston to live in his early youth, where he received his preliminary education, and took his doctorate degree from the University of Pennsylvania in 1859. He was commissioned assistant surgeon of the 24th Massachusetts Infantry August 7, 1863, and was discharged from that service April 12, 1864. He was appointed surgeon of the 31st U. S. colored Infantry May 2, 1864, which commission he resigned September 9, 1864, to accept a commission as assistant surgeon of U. S. volunteers. He was mustered out of service June 4, 1866, and on June 12th, eight days later, he was commissioned assistant surgeon in the U. S. army with the rank of first lieutenant. He was promoted to captain and assistant surgeon September 16, 1876, and to major and surgeon June 30, 1882. His military service during the civil war was principally with the armies in the field, and after the war ended he was assigned to duty, first at St. John's Hospital at Baltimore, and after several intermediate assignments he became post surgeon at Fort Dodge, Kansas. During service he contracted cholera, yellow fever and several other maladies incident to his military career, and was retired for disability, contracted in the service and in the line of duty, February 27, 1891.

While Dr. Tremaine was stationed at Fort Dodge he became instrumental in organising the Kansas City Medical College, and was appointed professor of surgery in that institution. In 1881, he was assigned to duty as post surgeon at Fort Porter, Buffalo, and while stationed here became engaged in an active private practice, which he has continued to hold until failing health, within the last few months, compelled him to relinquish it. He was one of the active promoters of Niagara University Medical College, and upon its organisation in 1883 he was appointed professor of didactic and clinical surgery in that institution. He was retired to emeritus honors in 1889. During his active career he was surgeon at the Emergency Hospital, which he organised, and he

was surgeon-in-chief at the Buffalo Hospital of the sisters of charity. He was also consulting surgeon to the Emergency, St. Francis and the Woman's Hospital, and visiting surgeon to Erie County Hospital. He was a member of the Buffalo Academy of Medicine, having been president of its surgical section, a member of the American Medical Association, comrade of the Grand Army of the Republic, and a companion of the military order of the Loyal Legion of the United States.

Dr. Tremaine was a man of sterling integrity of character, a skilful surgeon and a forceful debater. If he appeared sometimes to be dogmatic it was partly because of his military training, and partly because it was natural for him to be aggressive. He has contributed much to the advancement of the science of medicine and leaves a record as a man and physician to be emulated.

The Medical Society of the County of Erie in respect to the memory of Dr. Tremaine passes the following resolutions:

Resolved, That the sympathy of the society is tendered to the widow and children of our deceased colleague in their bereavement.

Resolved, That this memorial and these resolutions be spread upon the minutes of this society and that it will attend Dr. Tremaine's funeral in a body.

Resolved, That this memorial and resolutions be offered for publication in the BUFFALO MEDICAL JOURNAL and in the daily newspapers.

WILLIAM WARREN POTTER.
CORNELIUS C. WYCKOFF.

The committee on nominations made its report as follows: For president, Dr. Lucien Howe; vice-president, Dr. J. B. Coakley; secretary, Dr. Franklin C. Gram; treasurer, Dr. Edward Clark; librarian, Dr. Wm. C. Callanan. For censors, Drs. J. B. Coakley, C. E. Congdon, T. F. Dwyer, Irving W. Potter and J. F. Krug. For delegates to the Medical Society of the State of New York, Drs. Herbert U. Williams, Arthur W. Hurd, Peter W. Van Peyma, Thomas B. Carpenter, Grover W. Wende, Eugene A. Smith, Earl P. Lothrop, of Buffalo, and J. G. Thompson, of Angola.

Dr. E. H. LONG moved that the report be referred back to the committee to select a vice-president to represent the towns. The amendment was lost.

A motion to adopt the report of the committee and to instruct the secretary to cast the ballot of the society for the nominees was then carried. The secretary cast the ballot of the society for the nominees, whereupon the president declared them duly elected.

On motion of Dr. BROWN the sum of $50 each was ordered to

be paid to the secretary and treasurer for their services during the past year.

Treasurer CLARK stated that many members were in arrears with their dues, aggregating to a large amount, among them several members who have advertised their business, and some have refused to pay.

Dr. COAKLEY moved that the treasurer be authorised to employ a collector to assist in securing the dues in arrears.

Dr. BAYLISS moved in amendment that the treasurer make an effort to collect the dues and report the results at the next regular meeting, and that those who refuse to pay be then dropped from the roll of membership. Dr. Coakley accepted the amendment.

Dr. CRONYN raised the point that the by-laws of the society made the necessary provisions.

The resolution as amended was adopted.

Dr. BENEDICT moved that the board of censors in coöperation with the treasurer of this society be requested to report at the next meeting the names of the members of this society engaged in illegal or unethical practice.

The motion was lost.

Dr. CLARK moved that the society direct the treasurer to notify members who are in arrears with their dues for three years or more, that unless they pay the same by the next semi-annual meeting their names may be dropped from the roll, in accordance with the by-laws of this society. Motion adopted.

Dr. KRAUSS stated that the society had appointed a committee to entertain the Central New York Medical Society at its recent Buffalo meeting and had appropriated $50 for this purpose. The number who attended was 87 and far exceeded the number expected. There was, therefore, a deficiency of $37 and he moved that an order be drawn in favor of the Ellicott Club to meet this deficiency.

The motion was carried.

Communication was received from the American Electro-therapeutic Association, which will hold its eighth annual meeting in Buffalo, September 13–15, 1898, asking that a delegate be sent to represent the society and also extending a general invitation to members of this society to attend the sessions. The invitation was accepted and on motion of Drs. KRAUSS and GROSVENOR, President Howe was elected a delegate to the association.

Librarian CALLANAN reported that he received several volumes

for the library during the past year and suggested that he be authorised to collect biographical sketches of members who died during the year.

On motion of Dr. CRONYN the report of the librarian was accepted.

The president having been authorised to appoint a committee on legislation to look after the society's interests at Albany, appointed Drs. W. W. Potter, Ernest Wende and Edward Clark as such committee, and re-appointed Drs. E. H. Long, E. C. W. O'Brien and S. A. Dunham as the business committee.

This concluded the business portion of the session and Dr. J. G. THOMPSON, of Angola, read a paper on Colles' fracture.

Dr. GRAM's paper on Infant mortality was read by title and at 12.30 P. M. a recess was taken until 3.30 P. M.

AFTERNOON SESSION.

Vice-president COAKLEY called the society to order at 3.30 P. M., and Dr. F. H. STANBRO, of Springville, read a paper on Some diarrheal diseases of children.

Dr. WM. G. BISSELL read a comprehensive paper on Formaldehyde disinfection.

He was followed by G. E. GORDON, Esq., of Boston, Mass., who spoke on Modified milk for infant feeding. Although not a physician he said he had a vast experience in the feeding of infants, and the question of how infants should be fed was an important one. It had long since been established that ordinary dilutions of milk did not suffice to feed an infant. It was a choice between artificial food, a wet nurse, and some form of modified milk. He passed over the two former and said the last was the best for the infant which cannot get the mother's breast. After seven years' experience in Boston he found it to be the almost universal opinion among the leading baby feeders, that with good cow's milk, properly prepared according to the physician's prescription, there should be no reason why a child should not thrive. A baby can not only be grown into a fine child, but also children who were handicapped by bad feeding or sickness may be restored by modified milk.

He spoke of the method of producing modified milk, which contains exactly what the physician wants that particular child to get. The success, where properly employed, had been so great that a professor, when recently addressing a post-graduate class,

said that when a baby does not do well on laboratory food it was the fault of the physician.

The expense, which is apparently great at fifty cents per day, is little compared to the results and would not pay the laboratory costs were it not for the large amount of milk and cream sold in addition.

Discussion then followed on the papers presented.

Dr. HOPKINS said that Dr. Bissell's paper treated of a practical application of an interesting subject, but it seemed to him that the question of formaldehyde disinfection is still in the laboratory stage. The manner of its use is still complicated to a degree, while it should represent simplicity, cheapness and applicability.

Prof. JOHN A. MILLER said that experience holds us to a conservative stage. Formaldehyde has an action on microörganisms, but the question of volume strength has been sadly overlooked. He minutely criticised the processes of production by means of the several kinds of apparatus on the market, and asked whether formaldehyde is strictly a germicide or whether it is simply inhibitory in its action.

Dr. SNOW, in discussing Mr. Gordon's remarks, said he formerly used a mixture of cream and whey, but considered the Walker-Gordon method an ideal one, because you can prepare the food as needed in every case. Still he did not believe it was a panacea for all children's ills. He differed from Mr. Gordon in the latter's statement that the day of the wet nurse has passed away, for if a proper wet nurse can be obtained the results are the best.

Dr. EUGENE A. SMITH likewise gave the wet nurse the preference, but said she is usually hard to obtain when wanted. If modified milk will supply the deficiency he would commend it. He related a case in which he had good results by its use.

Dr. EDWARD CLARK said the question of milk is probably attracting more attention of scientific bodies today than any other. He discussed the various steps which the milk undergoes before it reaches the consumer and pointed out where the greatest danger lies. He also touched upon the plan of the Buffalo Health Department, which is designed to modify or remedy the existing evil.

Dr. SHERMAN briefly discussed the modified milk question, which he considered the best method yet introduced. It fails in some cases, so does mother's milk.

A vote of thanks was tendered Mr. Gordon for his interesting address and to all those who presented papers.

The society at 6 o'clock P. M. adjourned.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

Quarterly meeting held at the Academy parlors, Palace Arcade, Tuesday evening, January 11, 1898.

MEETING called to order at 8.45 P. M. by the president, Dr. LUCIEN HOWE. Minutes of last quarterly meeting were read and approved.

The secretary reported the favorable action of the council on the following applicants: Drs. Dennis J. Constantine, H. C. Rooth, Almon H. Cooke, A. W. Bayliss, Albert J. Colton, Frederick M. Boyle, Edgar A. Forsyth, Francis W. McGuire, Martha F. Caul and Edward L. Frost for resident membership, and Drs. C. G. Leo Wolf, Niagara Falls, N. Y., and C. R. Regan, North Tonawanda, N. Y., for nonresident membership. They were ballotted for separately and duly elected fellows of the Academy. The president then stated that he had a very unpleasant duty to perform in announcing the death of one of the prominent members of the Academy, a former chairman of the section of surgery, Dr. William S. Tremaine.

On motion a committee of three was appointed to draft resolutions on the death of Dr. Tremaine. The Chair appointed as such committee Drs. Chauncey P. Smith, William H. Heath and C. C. Wyckoff.

The program of the evening under the auspices of the section of surgery consisted of the following: The parasitic origin of cancer with demonstrations of the organisms and microscopical sections, Dr. Roswell Park; discussed by Dr. Herbert U. Williams and Dr. Woods Hutchinson.

Dr. PARK received a very warm welcome from the members, as was evidenced by the hearty applause of the ninety-six present.

The PRESIDENT, on behalf of the academy, extended to him a welcome on his safe return from abroad very much improved in health. Dr. Park feelingly thanked the president and members of the academy, collectively and individually, for their kind reception.

The following resolutions on the death of Dr. Tremaine were then read by Dr. William H. Heath:

The Buffalo Academy of Medicine deeply deploring the death of Dr. William S. Tremaine, one of its early members, herewith tenders its sincere sympathy to his saddened family, and desires publicly to bear testimony to his character, worth and personality. Intrepid in his

aggressiveness for the advancement of his profession and its ethics, to which he contributed more than ordinary, fearless in all that to his light was right, loyal to a degree unexcelled, the craft of medicine has lost not only a faithful worker, but those who knew him, a loyal friend; this community has lost a valuable life, the poor of it a benefactor whose kindness and consideration were without limit. His deep sense of all obligations was ever uppermost in his mind, and it can be truly said that his early and untimely end was, in no small degree, hastened by his self-sacrificing sense of duty.

It is the sense of this Academy that a copy of the sentiments herein expressed be transmitted to the family, that they be made known to the public through the press, and to the profession at large through the BUFFALO MEDICAL JOURNAL.

WILLIAM H. HEATH,
CHAUNCEY P. SMITH,
C. C. WYCKOFF.

On motion of Dr. ROSWELL PARK, seconded by Dr. William G. Ring, the above memorial was adopted.

Adjourned at 10.45 P. M.

Progress in Medical Science.

SURGERY.

CONDUCTED BY JOHN PARMENTER, M. D., Buffalo, N. Y.,
Professor of anatomy and adjunct professor of clinical surgery, Buffalo University Medical College.

FIVE CASES OF GENERAL SUPPURATIVE PERITONITIS TREATED BY A NEW METHOD.

FINNEY (*Johns Hopkins Hospital Bulletin*) bases his operation upon the known power of the healthy peritoneum to take up and dispose of infectious material. He regards this property as possessed by the infected peritoneum as well, and that operation in septic peritonitis often fails because the peritoneum is not sufficiently cleansed at the time of operation. The steps of the operation described by him are briefly as follows: A sufficiently long incision to permit easy access to the peritoneal cavity is made, the coils of the small intestine are removed from the peritoneal cavity, beginning with the worst coils first; these are packed in warm gauze or towels and then thoroughly and systematically he wipes out the peritoneal cavity with large pledgets of gauze wrung out

of hot salt solution, paying particular attention to the pelvic portion of the cavity. Next the small intestines are systematically examined, loop by loop, and cleansed by wiping with gauze compresses wrung out with hot salt solution as before. All adherent flakes of partly organised lymph must be entirely removed, considerable force being sometimes necessary to effect this. Upon the thoroughness of this cleansing, both of the intestines and peritoneal cavity, the success of the operation depends. It is advantageous to wipe the coils under a constant irrigation of warm salt solution. All foreign material having been removed, the intestines being thoroughly clean to the naked eye, the bowels are returned, the most damaged portion of the intestine being returned last, this giving it a superficial position. The abdominal wound is then tightly closed, room enough being left for a gauze drawn between two sutures. Distension or pain in the abdomen after the operation is treated by a thorough application of the Paquelin cautery; calomel in divided doses, followed by a turpentine enema, are used for catharsis. An essential for success is that the operation should be performed within a few hours after perforation. Five successful cases are detailed to support the claims made for this method.

DIFFERENTIAL DIAGNOSIS BETWEEN APPENDICITIS AND INTESTINAL OBSTRUCTION FROM GALL-STONES.

Th. Kölliker (*Centralblatt für Chirurgie*, October 28, 1897,) relates a case of obstruction from gall-stone presenting diagnostic difficulty and much resembling a case of appendicitis described by Sonnenberg in his work upon perityphlitis. The history as given is briefly as follows:

Woman, 58 years of age, without previous history of gall-stone colic, but having had a few months previously an attack of appendicitis, was suddenly taken ill with constipation three days previous to his first observation, followed in twenty-four hours by fecal vomiting; a tumor could be felt in the ileo-cecal region. Various diagnoses were made by observers, one being compression of the bowel from an old perityphlitic exudate, another being obstruction due to disease of the uterine appendages of the right side. There were no symptoms of the trouble in the biliary passages. The author concluded that the case was one of compression of the bowel by a perityphlitic exudate. The peritoneal cavity was opened in the middle line. The right half of the cavity was filled with distended bowels and from the left distended coils of small intestine pressed forward. Presently a hard body, filling the lumen of the bowel, was discovered. The bowel was opened on its convex sur-

face and a gall-stone, four centimeters by three centimeters, was extracted. The mucous membrane of the intestine was closely attached to the stone and ulcerated in the superficial surface. The wound was closed and recovery ensued, the first stool occurring twenty-four hours after operation.

For comparison, Sonnenberg's case was narrated and exhibited the following symptoms: The case was that of a fifty-year-old patient who had had several attacks of perityphlitis, and in recent times a resistance in the ileo-cecal region, with acute symptoms, and obstruction appeared. Fever was absent. After opening of the peritoneal cavity there was revealed a chronically inflamed and moderately adherent appendix, which seemed scarcely sufficient cause for new developments, especially as the previous resistance in this region had disappeared. After a search a goodly-sized gall-stone was discovered lying in one of the coils of the intestine. The patient died in collapse with reappearance of the obstruction before death. At the autopsy a second stone was found wedged in the duodenum, another one in an ulcerated point of communication between the gall-bladder and the duodenum, and a fourth in the gall-bladder. The coils from which the gall-stone had been removed were in part gangrenous.

The writer concluded that some cases are most difficult to diagnosticate before opening the abdomen, but that the greater movability of the tumor and the acute onset without fever are suggestive of gall-stone obstruction.

THE USE OF THE PHONENDOSCOPE.

Van Arsdale, (*New York Polyclinic*, August 15, 1897,) after describing the instrument, proceeds to enumerate the various uses to which it may be put. Among these are the mapping out of various organs, the detection of fractures and dislocations, the diagnosis of tumors, and the like. An illustrative example of the method of using this instrument in detecting fractures of the ulna is given. The pin of the instrument is placed over the head of the ulna at the lateral aspect of the wrist, and a scratching or rubbing with the finger is made over the olecranon, the sound being readily transmitted unimpaired to the ears when the ulna is intact; if, however, a fracture has taken place in the shaft of the ulna the sound will be heard very indistinctly, and if the ends of the fragments be not in contact no transmission of sounds whatever will take place. Slight variations in transmission are readily appreci-

able on comparing the conditions in the sound arm with those in the injured one. In another instance the diagnosis of muscles lying between the fractured ends of the clavicle and preventing union was made sometime later with verification by operation.

Effusions in the knee-joint may be detected by placing the pin either as near as possible to the capsule of the joint or on the ligamentum patellæ, the vibrations in the fluid set in motion by friction of the finger being plainly perceptible. Tumors with density interfering with that of the neighboring tissues may be outlined and thus supplement palpation or be of value where palpation is impracticable. Tension having been properly estimated by palpation one can differentiate between the various sounds of transmission in solid matter, in fluids and in air. It is to be remembered that the greater density of the examined organ the greater the force required in stroking the finger with the skin to elicit transmission. The pitch also becomes deeper with the density. The author finds its most practicable value in the diagnosis of abdominal tumors, and relates instances where by its use he has diagnosticated tumors connected with the liver and with the ascending and transverse colon at the flexure. He also believes it perfectly practicable to differentiate intra- from retro-peritoneal tumors.

Joseph Price (*International Journal of Surgery*, October, 1897,) gives some forcible and undeniable conclusions upon the subject of post-operative complications and reoperations. The writer believes that there are too many useless and harmful operations being done at the present time, that reoperations are occasioned by one or two circumstances. In the first place, where complete operation might imperil the life of the patient; in the other, reoperation is occasioned because of the ignorance or cowardice of the operator, and that this latter is by far the more frequent cause. He believes that recovery from operation should mean cure in the vast majority of cases, but that it does not is well known. Before operation there should be reasonable certainty as to the existing trouble in order that future action may be decided. In many cases repeated operation was unjustifiable and caused sequelæ which make the second operation much more difficult and dangerous. All exploratory operations he regards as implying ignorance and doubt, but when properly done there may be no deleterious after-results. Among the procedures giving a large per cent. of

operations the writer mentions dilatation and curettement, vaginal puncture, vaginal hysterectomy, appendicitis, complicated by obstruction or adhesions following primary operation, neglect to free adhesions, e. g., from the bladder or ileum, in all cases where they exist after the primary operation, to neglect to remove the remaining and irritating materials; to trim away ragged and fringy adhesions, to clear away débris and clot discharges, to establish a sufficient drainage, and the like. The paper is well worthy the perusal of surgeons both young and old, and being as it is, unquestionably, based upon a large experience, its wholesome truths should become well known to surgeons.

MEDICINE AND THERAPEUTICS.

TREATMENT OF INTESTINAL CATARRH.

IN CASES of obstinate subacute intestinal catarrh, where simple astringent and digestive agents fail to produce satisfactory improvement, a combination of remedies in accordance with the following prescription (Dr. A. L. Hall, of Fairhaven, N. Y.,) will usually render prompt benefit:

℞ Tr. ferri chloridi ..... dr. ii.
Tr. catechu ..... dr. iii.
Tr. Opii camphoratæ ..... dr. iv.
Ext. rhei aromatic fl. ..... dr ii.
Spts. vini gallici ..... oz. ii.
Syrupi simplicis ..... q. s., ad., oz. viii.

M. Sig.—For a child one to two years old, one-half to one teaspoonful every four to six hours.

THE DRUG TREATMENT OF INSOMNIA.

DR. R. FERGUSON, lecturer on therapeutics in the Western University (*British Med. Jour.*), presented at the last meeting of the British medical association some practical suggestions on the use of drugs in the treatment of insomnia. While he did not believe that the hypnotic is yet discovered, or ever will be, which is at once trustworthy as to producing the result desired and incapable of producing any unpleasant after-effects, sulfonal, in his opinion, came as near to this standard as any drug with which he was acquainted. The tardiness and permanency of its action was undoubtedly a consequence of its difficult solubility and slow absorption and could not be looked upon as a disadvantage if properly allowed for, since a second good night without a repeti-

tion of the dose was by no means an unusual occurrence. In the author's practice it had failed but rarely when given in the dose of 1 gramme. He had rarely, if ever, repeated this dose on the same night. In doses of less than thirty centigrammes it might be properly considered a semi-placebo. It should not be given continuously, that is, on successive nights, for any length of time and if its use has to be continued the intervals should be even longer than two days. The peculiarities of action of sulfonal could be best utilised by reserving it for a patient who had not slept for several nights and who it was pretty clear was not going to get a good night unassisted, so that the medicine may be given early—namely, 6 to 7 P. M., in order that its effect may be developed at about the regular time for going to sleep.

ANTIPYRIN FOR ATONIC ULCERS OF THE LEG.—Bosse, of Domnau, (*Berl. klin. Wochenschr.*) says: In a case of hemorrhage from an ulcer of the leg, antipyrin, spread on a piece of cotton wool, was applied. After a few days, on removal of the cotton wool, it was seen that the place was covered with splendid healthy-looking granulations. The author now spread antipyrin over the whole ulcerated surface, which was about the size of the palm of the hand. After ten days this large surface was covered with solid granulations and after twenty-two days the ulcer had completely healed by the aid of an ointment containing 2 per cent. of nitrate of silver. A similarly successful treatment was carried out in twenty-nine other cases.

The application of antipyrin, which was repeated every day, caused considerable pricking and burning pain, which lasted from five to fifteen minutes. This pain disappeared as soon as the drug had become liquified. It was considerably lessened by previous application of cocaine.

Signs of inflammatory reaction were never observed. In all cases where inflammatory signs existed already and the ulcer was very painful, the extremity edematous and the ulcers covered with sloughs and fetid discharge, it was found better to advise absolute rest and to begin the treatment by disinfectant and soothing applications. When all signs of inflammation had disappeared, antipyrin was dispersed over the ulcers. When, after using antipyrin, the granulations have become solid and abundant, treatment with various ointments, especially silver nitrate ointment, is recommended.

BUFFALO MEDICAL JOURNAL.

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EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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MEDICAL SOCIETY OF THE COUNTY OF ERIE AND THE DISTRICT ATTORNEY'S OFFICE.

AT THE seventy-seventh annual meeting of the Medical Society of the County of Erie, held in Buffalo, January 11, 1898, the board of censors, through its chairman, Dr. J. B. Coakley, made an elaborate report, published in full in another column, and which merits careful reading. It is the duty of the board of censors to apprise the society and the district attorney of any violations of the medical practice law within the county of Erie, and to take preliminary steps looking toward the punishment of the offenders. In the performance of their duty during the year 1897, the censors reported several cases to the district attorney, but he did not think them sufficiently flagrant to justify prosecution, or, perhaps in some instances he may have deemed the issue not well taken. Whatever may have been his reasons, the fact remains that there were no prosecutions, hence no convictions, and the result is that Buffalo is becoming somewhat famous as a camping ground for ignorant pretenders, faith cure healers, electro-magnetic fakirs and advertising quacks.

New York has carefully undertaken the task of guarding the entrance doors to the profession of medicine by a splendid system, that has for its principal object the protection of the people against ignorance and fraud. The state says that no man shall enter upon the study of medicine until he is in possession of a preliminary education equivalent to that of a graduate of a high school, that he shall then pursue the study of medicine in a registered college during four years before he shall be entitled to a diploma. It further prescribes that the college diploma shall not be a license to practise medicine, but that its possession, obtained in the manner

hereinbefore mentioned, shall be a passport to the state examination, and that having passed the latter successfully, according to the rules prescribed by the Regents of the University of the State of New York, the candidate shall be entitled to receive the state license to practise medicine and surgery, which license must be registered in the office of the clerk of the county wherein the licensee chooses to take up his residence and practise his profession. Now, if the state takes all these pains to prevent ignorant and incompetent men from entering the ranks of medicine it would be very strange if it did not intend to protect its citizens, whom it had thus carefully conducted into practice—as well as its millions of other citizens not doctors—from ignorant, incompetent and dangerous men or women, who are offering to heal the sick and maimed for a compensation, but who do not possess the legal right to do so.

Mr. Kenefick, the district attorney, for whose talent as a lawyer and whose standing as a brilliant prosecuting officer we have naught but the profoundest respect, before the ink is scarcely dry upon the censors' report makes haste, if he is correctly reported in the newspapers, to shout "malice" on the part of the censors as a defense to the course his office has pursued in regard to this subject. The suddenness with which Mr. Kenefick comes to his own defense leads us to believe, or at least to hope, that he has been misquoted. The report of the censors was a carefully prepared, painstaking and well-written document, dignified in tone and earnest in form. It deserved, to say the least, an equally careful reply in writing rather than a sudden outburst of speech delivered in the columns of the newspapers through the medium of reporters. No! Mr. Kenefick is mistaken if he thinks there is any malice in the censors' report. We do not believe there is a single member of the medical society of the county of Erie who has ought but the kindest personal feeling toward Mr. Kenefick. The attitude of the society is one of intense desire for the protection of its interests and of anxiety for the full and complete coöperation of the district attorney's office in preventing violations of the medical practice law.

The society is not satisfied to have the decision in Smith vs. Lane, based on statutes prior to 1881, held over its head like a club that in effect serves to prevent issues from being tried under statutes enacted since that date and now in force. In the county of New York there have been many arrests and a large proportion

of convictions as well as a large sum collected in fines under the present law. Does it not seem strange that a statute adequate in New York is incompetent in Erie? What the medical society desires is, that a well-selected case shall be taken into the courts and fought to a finish in the hope that a judicial opinion may be obtained as to the meaning of the phrase "to practise medicine and surgery," and in the belief that a more liberal, modern and correct definition will be given than in that *bête noir* of the district attorney's office, Smith vs. Lane.

While on this subject perhaps it may not be out of place to invite Mr. Kenefick's attention to a case recently tried in Kentucky and referred to editorially in the columns of the JOURNAL, (volume XXXVII., p. 134,) issue of September, 1897. The action was brought by the Kentucky state board of health against an osteopath (whatever form of trickery that may mean) who, it was charged, had pulled and flexed the leg and thigh of a little sufferer from hip disease so that febrile action was set up that necessitated medical treatment.

Judge Thompson, before whom the case was tried, gave his opinion that this mountebank had subjected a child laboring under tuberculous disease of the hip-joint to cruel and unnecessary torture, that affected its health and necessitated the employment of a real physician to avert calamitous results. The learned judge further defined the practice of medicine as follows: "Any person who, for compensation, professes to apply any science which relates to the prevention, cure or alleviation of the diseases of the human body, is practising medicine within the meaning of the statute." This concise yet comprehensive definition, which will doubtless serve as a precedent, is broad enough to include every form of pretender from the itinerant advertising quack to the so-called christian science and faith cure healers. New York may well do homage to Kentucky, whose noble profession has driven from its borders every irregular practitioner of whatsoever kind, system or genus.

The earnestness of the Erie county society is fully attested by the fact that it proposes to employ its own attorney, whose duty it will be to prepare evidence in the cases and get it ready for the district attorney's office. This lawyer will in no wise antagonise Mr. Kenefick and his official assistants, but will be a supplementary force to their work and a coadjutor in enforcing the law. If a discreet attorney is employed by the county society, and we trust

only such an one will be engaged, he has a fine opportunity to distinguish himself as an expert in medical law and to make friends with the entire profession of medicine in Erie county.

Finally, let it be understood that there can be no antagonism between the medical society of the county of Erie and the district attorney's office in this matter unless it shall be of the latter's seeking; and that the members of the society, individually and collectively, bear the best wishes toward our brilliant district attorney, Mr. Daniel J. Kenefick.

TOPICS OF THE TIME.

The christian-science editor of the *Buffalo Enquirer* has let himself loose on the bill proposed by the board of state medical examiners in Massachusetts, whereby it is sought to obtain a definition of what shall constitute the practice of medicine in that state. The following, according to the *Enquirer*, is the substance of the definition sought to be enacted into law:

> Any person shall be regarded as practising medicine within the meaning of this act who shall append to his name the letters M. D., or shall assume or advertise the title Dr. or physician, or any other title which shall show, or tend to show, that the person assuming or advertising the same is a practitioner of medicine, or of any of the branches of medicine, or who shall investigate or diagnose, or offer to investigate or diagnose, any physical or mental ailment or defect of any person with a view to affording relief, as commonly done by a physician or surgeon, or who shall prescribe for or treat a person for the purpose of curing any real or supposed disease, whether by the use of drugs or by the application of any other agency or alleged method of cure or alleviation or prevention of disease, or to operate as a surgeon for the cure or relief of any wound, fracture or bodily injury or deformity, after having received therefor, or with the intent of receiving therefor, either directly or indirectly, any bonus, gift or compensation.

The *Enquirer's* enthusiastic disciple of christian science thus comments on the Massachusetts' idea:

> Perhaps, if the christian scientists themselves established a standard of their own, thus preventing the gross charlatanism that has often been associated with it, as with nearly every radically new movement, the desired end would be reached. Christian science in the hands of an expert medical man can probably result in no harm. But the movement has the most to fear, not from antagonistic outsiders, but from quacks, who have allied themselves with the movement and under the

protecting skirts of an earnest faith practise their incapacity with frightful results.

Many of the professional christian scientists have a legal M. D. which they append to their names; many deprecate the use of a title. In Boston, which is one of the places where christian science finds very fruitful ground, considerable discussion has been stirred up by this suspected legislation.

It is undoubtedly advisable to have some standard of medical efficacy recognised by the profession whereby to separate the quack from the genuine. But if a discrimination is made against those who practise medicine in a fashion construed to be unorthodox by one body of doctors, trouble is bound to ensue.

It will be news to a large proportion of the intelligent world that so-called christian science is a "profession" in which there are "regulars" and "irregulars," scientists and quacks, M. D.'s and mountebanks; but then the world moves. Perhaps the c. s. editor aforementioned may also learn something that is new to him by reading in our editorial pages the Kentucky definition of the practice of medicine.

The law governing the practice of medicine in this state is being rigidly enforced through the efforts of the Medical Society of the County of New York. The society is splendidly organised and employs an able attorney at a reasonable and definite salary. Since the passage of the law in its present form a large number of arrests have been made and convictions obtained, while a number of cases are still pending. Fines of from $100 to $500 have been imposed upon druggists, pseudo-physicians, illegal practitioners and every other genus detected violating the law. One of the late cases was that of a druggist who was fined $150 for the illegal practice of medicine. This should be a warning to counter prescribing so frequently indulged in by druggists, but who in every instance become liable under the law.

Every county medical society in the state should instruct its board of censors to keep vigilant watch for violations of the practice act and to report all such to the proper prosecuting officer. With the advanced standards in medical education and the rigid guard placed at the entrance doors, a careful expurgation of all the illegal doctors should be made. The profession of medicine will then become honorable in the highest sense of the term.

Personal.

Dr. P. W. Van Peyma, of Buffalo, has been appointed a member of the board of school examiners to fill the unexpired term of Dr. Conrad Diehl, elected mayor. The appointment of Dr. Van Peyma not only receives professional but general approval. He is a native of Erie county, has been a resident of Buffalo many years and is in every way qualified for the duties of the office.

Dr. R. Harvey Reed, of Columbus, O., has resigned the editorship of the *Columbus Medical Journal* to accept the appointment of superintendent and surgeon-in-charge of the Wyoming General Hospital, at Rock Springs, Wyoming. Dr. Reed will retain his interest in the Columbus Medical Publishing Co., and become an associate editor of the journal.

Dr. Roswell Park and Mrs. Park, of Buffalo, who have been spending a number of months in Southern Europe, arrived home January 1, 1898. Dr. Park immediately resumed his professional work as well as his duties as professor of surgery at Buffalo University Medical College.

Dr. F. Whitehill Hinkel and Mrs. Hinkel, of Buffalo, who have been in Europe for some months, returned just before Christmas last. Dr. Hinkel has resumed his practice as well as his teaching at Buffalo University Medical College, in which he is professor of clinical laryngology.

Dr. W. E. Dignen, of Buffalo, on his return from Europe last autumn, established himself at 544 Plymouth avenue, instead of at 381 Fourteenth street, as heretofore mentioned.

Obituary.

Dr. William S. Tremaine, of Buffalo, died at his residence Sunday, January 9, 1898, aged 59 years. He was a native of Canada, but graduated in medicine at the University of Pennsylvania, and entered the military service of the United States during the civil

war as assistant-surgeon of the 24th Massachusetts infantry in August, 1863. After serving in various capacities as a medical officer, the details of which will be found in a memorial adopted by the medical society of the county of Erie and published on another page in this issue of the JOURNAL, he was finally retired for disability in February, 1891.

Dr. Tremaine came to Buffalo in 1882, through assignment as post-surgeon at Fort Porter, and has resided here for the most part from that time until his death. During these years he was actively engaged in the practice of surgery and in teaching the science and art thereof for a part of the time at Niagara University. He was ready of speech, interesting and forceful in debate, a skilful operator, resourceful and even original in expedients, and altogether a most useful member of the profession. His widow and five children survive. His funeral was largely attended at St. Paul's cathedral, January 11, 1898, escorted by a battalion of regulars from Fort Porter and his remains were deposited in the vault at Forest Lawn with military honors.

MR. ERNEST HART, editor of the *British Medical Journal*, died at his residence in London, January 7, 1898, aged 62 years. His early education was obtained at the City of London school, and his medical education at St. George's hospital medical school, and he was admitted to membership in the Royal College of Surgeons in 1856. Soon afterward he turned his attention to literary work and was in succession assistant editor of the *Lancet*, supervising editor of the *Sanitary Record* and of the *London Medical Recorder*, and finally was appointed editor of the *British Medical Journal* in 1866, holding the latter place until his death. The American profession will recall Mr. Hart's visit to this country in 1893, when he attended the meeting of the American Medical Association at Milwaukee, during which time he addressed the American Medical Editors' Association, and also read a paper in the general session of the American Medical Association on water-borne diseases. Coming again to America in the same year he attended the first Pan-American Medical Congress at Washington, in September, 1893.

A few months ago Mr. Hart underwent amputation of a leg for necrosis complicating diabetes, from which he made a temporary rally, but finally succumbed to the onward progress of the malady. Mr. Hart's fame will largely rest upon the fact that during his editorship of the *British Medical Journal* he lifted it from

obscurity to fame and made it one of the greatest weekly medical newspapers of the age.

Dr. Joseph O'Dwyer, of New York, died at his home in that city January 7, 1898, aged 56 years. He was a native of Ohio, passed his early life in Canada and received his academic education at McGill University, Montreal. He took his doctorate degree at the College of Physicians and Surgeons at New York in 1866, and after graduation served as resident physician at the Charity Hospital (now the City hospital) and next became examining physician at Bellevue hospital. He was a member of several medical societies—city, state and national—and was ex-president of the American pediatric society. Four sons survive, his wife having died about nine years ago. Dr. O'Dwyer's memory will ever remain green for what he contributed to the relief of suffering humanity in a most modest and unassuming manner. His name will always be associated with intubation of the larynx, a method of treatment that became possible through the ingenious devices of this worthy physician. It was shown at the autopsy that his death was caused by thrombosis of the basilar artery, with softening of the right lobe of the cerebellum and in the right half of the pons, together with localised menigitis.

Dr. Joseph Lewi, of Albany, died at his residence in that city, December 19, 1897, aged 77 years. He was one of the more prominent of the older physicians in that portion of the state and was universally respected by all who knew him. He received his medical education at the University of Vienna and came to this country soon after graduation. He has served as president of the medical society of the county of Albany and at the time of his death was the senior censor of the medical society of the state of New York. He was for twelve years a member of the state board of public instruction and declined reappointment upon the expiration of his fourth term of service. He leaves six sons, two of whom, as well as a son-in-law, Dr. Herman Bendell, are physicians. One daughter died only a week before the decease of her father. He was the father of Dr. Maurice J. Lewi, of New York, secretary of the state board of medical examiners. Dr. Lewi leaves a lasting impression on the professonal and social life of the city of his residence and died lamented by a vast group of relatives, friends and acquaintances.

Dr. Henry Parke Custis Wilson, of Baltimore, died at his home in that city Monday, December 27, 1897, aged 70 years. He took the degree of A. B. at Princeton in 1848, and his doctorate degree from the University of Maryland in 1851. He was descended from the Custis family, hence was a relative of Martha Washington. He was one of the founders of the American gynecological society and served as its president in 1889. He was also a member of local, state and national medical bodies, as well as an honorary member of many foreign societies. He enjoyed the personal friendship of the most prominent physicians at home and abroad and was easily one of the most distinguished physicians of his time. Dr. Wilson lost a son by drowning nearly two years ago, which was a sad blow in his declining years. He leaves a widow and five children, one of whom is Dr. Robert T. Wilson, of Baltimore.

Dr. John Berrien Lindsley, of Nashville, died at his home in that city, December 7, 1897, aged 75 years. Dr. Lindsley was a prominent sanitarian, having been secretary of the Tennessee board of health for many years. He was a member of several scientific societies at home and abroad.

Dr. William H. Robb, of Amsterdam, N. Y., died at Selma, Alabama, whither he had gone for his health, January 12, 1898, aged 54 years. He had practised many years at Amsterdam, where he was esteemed as a good physician and prominent citizen.

Professor Tarnier, the distinguished French obstetrician, died at Paris, November 23, 1897, in the seventieth year of his age. His name will go down to posterity as the inventor of the axis-traction forceps—a distinctive contribution to the obstetric armamentarium.

Society Meetings.

The Medical Society of the State of New York held its ninety-second annual meeting Tuesday, Wednesday and Thursday, January 25, 26 and 27, 1898, in the city hall, Albany, commencing at 9.15 A. M. on the 25th and ending at 1 P. M. on the 27th, under

the presidency of Dr. Seneca D. Powell, of New York. The following program was observed :

TUESDAY MORNING SESSION, 9.15 O'CLOCK.

President's inaugural address, reports of officers and committees, executive business.

Papers.—Throat and nose affections and their relations to general medicine, Walter F. Chappell, New York ; Ear manifestations in general disease, Wendell C. Phillips, New York ; Cases of acute nondiphtheritic inflammation of the larynx, requiring the prolonged retention of the intubation tube, John O. Roe, Rochester ; The report of a case of unusual contraction of the visual field and disorder of the color sense following an injury, T. F. C. Van Allen, Albany ; The railway surgeon and his work, C. B. Herrick, Troy ; What shall the state and county do for the consumptive? John H. Pryor, Buffalo ; The advantages of state control in medicine, with results observed, William Warren Potter, Buffalo.

TUESDAY AFTERNOON SESSION, 2.15 O'CLOCK.

Papers.—A contribution to the study of melancholia, with a report of the examination of the blood in fifty-seven cases, B. C. Loveland, Clifton Springs ; The cold water treatment of typhoid fever in private practice, John T. Wheeler, Chatham ; Anemia, R. C. M. Page, New York ; On the vagaries and wanderings of gall-stones, with clinical reports, Henry L. Elsner, Syracuse ; The treatment of delirium, Joseph Collins, New York ; Paralysis — prognosis and treatment, Edward D. Fisher, New York ; The relation of bacteria to the normal alimentary canal, Herbert U. Williams, Buffalo ; The rivals of the physician in practice, Reynold W. Wilcox, New York ; The hygienic management of dairies, E. F. Brush, Mt. Vernon ; The municipal control of milk supply in cities and villages, with report of health regulation, T. B. Carpenter, Buffalo ; The present status of expert medical testimony, Evarts M. Morrell, Yonkers ; Expert testimony, J. B. Ransom, Dannemora.

TUESDAY EVENING SESSION, 7.15 O'CLOCK.

Practical exposition of the x-ray in medicine and surgery. Exhibition in charge of Arthur L. Fisk, of New York.

Papers.—Technique and apparatus, Samuel Lloyd, New York ; The x-ray in medicine, Dr. Williams, Boston ; The x-ray in surgery,

Arthur L. Fisk, New York; The x ray, clinical experience, Wm. Hailes, Jr., Albany.

WEDNESDAY MORNING SESSION, 9.15 O'CLOCK.

Papers.—Some points in the technique of the Alexander operation, Herman E. Hayd, Buffalo; The present status of vaginal operations for diseases of the pelvic organs, Edwin B. Cragin, New York; Remote consequences of excessive uterine hemorrhage, W. E. Ford, Utica; Gauze drainage in laparatomy, Henry C. Coe, New York; The anatomy and function of the female perineum and the operation for its repair when lacerated, J. Riddle Goffe, New York; Traumatic injuries of the brain, J. H. Glass, Utica; Formaldehyde disinfection, E. H. Wilson, Brooklyn, discussed by Alvah H. Doty and Herman Biggs; The past, present and prospective methods of treatment of insanity in the state of New York, P. M. Wise, Albany.

WEDNESDAY AFTERNOON SESSION, 2.15 O'CLOCK.

Papers.—A year's work in appendicitis, Herman Mynter, Buffalo; The management of undescended testicle in hernia operation, William B. DeGarmo, New York; Investigation and exploration of the other kidney in contemplated nephrectomy, Geo. M. Edebohls, New York; Congenital dislocation of the shoulder backwards, with a report of seven cases and an operation for its relief, A. M. Phelps, New York; Discussion: The management of hypertrophy of the prostate gland and its complications. I. General consideration and catheter life, L. Bolton Bangs, New York; II. Prostatectomy and prostatotomy, supra-pubic and perineal, Samuel Alexander, New York; III. Bottini's galvano-caustic radical treatment, and the palliative treatment for hypertrophy of the prostate, Willy Meyer, New York; IV. Castration for the relief of hypertrophied prostate, L. S. Pilcher, New York; V. Stone, associated with hypertrophy of the prostate, E. L. Keyes, New York; Excision of the fibula for sarcoma, Samuel Lloyd, New York; The treatment of the fracture of the femur in children, Theodore Dunham, New York.

WEDNESDAY EVENING SESSION.

In the senate chamber at 7.45 o'clock. Anniversary address by the president. Reception by the president to the members, delegates and invited guests at the Albany Club at 9.30 o'clock.

THURSDAY MORNING SESSION, 9.30 O'CLOCK.

Business Session and Reports of Committees.

Papers.—Treatment of deficient excretion from kidneys not organically diseased, and some of the diseases peculiar to women, and diseases of the skin, L. Duncan Bulkley, New York; The relations of the physician to the practice of midwifery, C. F. Timmerman, Amsterdam; The conservative surgery of the fibroid tumor, A. H. Goelet, New York; Report of a case of osteotomy of both tibiæ and fibulæ for symmetrical antero-posterior angular deformity, F. H. Peck, Utica; Intra-tracheal injections for diseases of the bronchial tubes and lungs, H. S. Drayton, New York.

THE Buffalo Academy of Medicine held meetings during the month of January, 1898, as follows:

Section on Medicine.—Tuesday evening, January 4th, program: Pulmonary disturbance in children; infantile asthma, by Dr. Irving M. Snow. Diagnosis of empyema, by Dr. Eugene A. Smith.

Section on Surgery.—Tuesday evening, January 11th, program: The parasitic origin of cancer, with demonstrations of the organisms and microscopical sections, by Dr. Roswell Park. Discussed by Drs. Herbert U. Williams and Woods Hutchinson.

Section on Pathology.—Tuesday evening, January 18th, program: The pathology of the cerebellum, by Dr. William C. Krauss. Exhibition of specimens, by Drs. Marcel Hartwig, A. L. Benedict and others. Exhibit of veterinary specimens and anomalies, by Dr. John T. Claris, V. S., inspector state board of health.

Section on Obstetrics and Gynecology.—Tuesday evening, January 25th, program: Subject to be announced, by Dr. James F. W. Ross, Toronto, Canada.

THE Elmira Academy of Medicine held its annual meeting January 12, 1898. The retiring president, Dr. Frank W. Ross, chose for the subject of the annual address, Remarks on the use of the x-rays for diagnostic purposes with demonstration of their harmlessness and utility. A discussion followed on medical and surgical treatment in medico-legal cases, particularly in gunshot wounds of the brain, participated in by the following-named gentlemen, whose

titles are also given: A 1, Dr. Hamilton D. Wey, Legal responsibility; 2, Dr. E. G. Drake, Instruments nnd technique of operations; 3, Dr. H. S. F. Ritter, Anesthetics and anesthesia; 4, Dr. Charles L. Squire, The x-ray and other considerations; 5, Dr. G. V. R. Merrill, The mortality and personal experience; 6, Dr. Thomas A. Dundas, Post-mortem examinations; B 7, Dr. G. M. Case, The relations of rheumatism and allied ailments to diseases of the eye and ear.

The Lake Erie Medical Society held its regular quarterly meeting at Dayton, Tuesday, January 25, 1898, under the presidency of Dr. N. E. Beardsley, of Dunkirk. The following program was observed: Election of officers. Papers: Hodgkin's disease, Dr. Joseph Rieger, Dunkirk; discussion by Drs. Thompson, Lattin and Ward. Dietetics, Dr. E. E. Davis, Forestville; discussion by Drs. B. S. Bourne, C. C. Johnson and French. A case of prostatitis, Dr. W. W. Jones, Dayton; discussion by Drs. Dodds, Lake and Bedient. Diagnosis and treatment of diphtheria, N. E. Beardsley, Dunkirk; discussion by Drs. Richmond, Rieger and Cherry.

The ninth international congress of hygiene and demography will be held at Madrid, April 10–17, 1898, under the patronage of his majesty, King Alfonso XIII. and her majesty the Queen Regent. The president of the congress is Dr. Julian Calleja and the secretary-general is Dr. Amalio Gimeno, minister of the interior, to whom all correspondence should be addressed.

The St. Louis Laryngological and Otological Society was organised December 27, 1897, composed of those physicians of St. Louis who limit their practice to the treatment of diseases of the nose, throat and ear. Dr. J. C. Mulhall was elected president, Dr. J. B. Shapleigh, vice-president, Dr. F. M. Rumbold, secretary, and Dr. A. S. Barnes, Jr., treasurer, for the year 1898. Meetings will be held monthly.

The American Medical Publishers' Association will hold its fifth annual meeting at Denver on Monday, June 6, 1898 (the day preceding the meeting of the American Medical Association). Editors and publishers, as well as everyone interested in medical journalism, are cordially invited to attend and participate in the delibera-

tions. Several very excellent papers are already assured, but more are desired. In order to secure a place on the program, contributors should send titles of their papers at once to the secretary, Chas. Wood Fassett, St. Joseph, Mo.

Medical College and Hospital Notes.

THE board of directors of the German hospital has lately published its first annual report, which contains some interesting items. Practical relief work was begun on December 14, 1896, when the free dispensary was opened at 621 East Genesee street. The number of patients who were treated at the dispensary without charge, from December 14, 1896, to September 30, 1897, was: surgery, 469; diseases of women, 327; diseases of children, 178; diseases of eye, nose and throat, 332; skin and other diseases, 263; nervous diseases, 26; total, 1,900.

Another important event in the history of the German hospital has been the donation of a lot on Jefferson street, near Genesee, for a hospital site, by the heirs of the Gerhard Lang estate, acting through Edwin G. S. Miller. This gift was accompanied by a promise of $5,000 from the same source for the hospital. Plans for a three-story building, with all modern appliances, have been drawn, and it is expected that the hospital will be in operation before the close of the present year.

The present officers of the hospital are: President, Charles H. North; vice-president, Dr. Charles H. W. Auel; treasurer, Jacob Lang; secretary, M. J. Chemnitz; financial secretary, Charles Duchmann; corresponding secretary, George F. Lehmann; directors, Messrs. North, Auel, Chemnitz, Duchmann, Lang and E. G. S. Miller, Ottomar Reinecke and William Simon.

A PUBLIC hospital is about to be established at North Tonawanda. A citizens' and doctors' committee was appointed to meet on Friday evening, January 21, 1898, for the purpose of formulating plans to be followed. The Committee is made up as follows: William Gombert, Joshua S. Bliss, L. T. Payne, J. S. Thompson, John Bollier, William B. Kerr, Frank Batt, Mayor McKeen, Levant R. Van Dervoort, Dr. H. C. Leonhardt, Dr. A. T. Leonard, Dr. J. H. Helwig, Dr. C. R. Reagan, Dr. A. J. Martin.

The plan is not to make the hospital a charge upon the municipality, but to establish and maintain it by subscriptions from corporations, private individuals, church and charity organisations.

RUSH MEDICAL COLLEGE, of Chicago, is preparing to affiliate with the University of Chicago. The University trustees have announced the terms on which the medical college will be received and if these are accepted the relationship will be consummated June 1, 1898. It is certainly desirable that medical colleges of standing should make University affiliations whenever possible.

Book Reviews.

A PRACTICAL TREATISE ON SEXUAL DISORDERS OF THE MALE AND FEMALE. By ROBERT W. TAYLOR, M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. Octavo, 148 pages, with seventy-three illustrations and eight plates in color and monochrome. New York and Philadelphia: Lea Brothers & Co. 1897.

The author alleges in his preface that his aim is to portray sexual disorders on the basis of advanced knowledge of the anatomy, physiology and pathology of the sexual system. Heretofore, functional disturbances, sensory and motor neuroses—symptoms of sexual debility—have been inefficiently, erroneously and incompletely presented. Within the past few years the study of sexual and urinary diseases has been directed to a more advanced knowledge of the functions, structures and pathology of the genito-urinary system. The author states that his presentation of sexual disorders has been largely elaborated from information founded upon personal investigation and experience, and that the basis of the study of genito-urinary diseases will be so established as to be found helpful to the general practitioner in the management of a large group of cases which have been ill-understood and even avoided by the every-day medical man.

Chapter I.—In this chapter the anatomy of the sexual organs is carefully and accurately presented, including some new and original illustrations. In describing the nerves of the penis, it is stated that the sensorium commune of the external male genitals is seated in the glands, and that there is also an internal sensorium located in the middle of the prostatic urethra. The ducts of three orders of muciperous glands open into the anterior urethra. These are the glands of Littré, Morgagni and Cowper. The secretions of Littré's follicles and Morgagni's crypts, lubricate and alkalinise the urethral canal, and thus prepare the way for spermatozoa,

while the secretion from Cowper's glands forms part of the seminal discharge.

The prostate is essentially a sexual gland, incidentally employed in urinating, but its chief function is sexual. To support its glandular formation there is fibrous connective tissue and unstriped muscular substance. Surrounding the gland are bundles of unstriped muscular fibers, which expel its secretion into the urethra. In the young the prostate is made up of groups of fairly well defined glandular lobules. The gland ducts are not invested with muscular structure and there is no storage for its secretion, which is copiously elaborated and expelled during the sexual act. [The prostatic secretion probably supplies the greater bulk of the seminal fluid.]

The seminal vesicles are blind-ending tubes with diverticula of various sizes. The vesicle is two and a half inches long, one-half to one inch wide and one-quarter to one-half thick. Columnar and cuboidal epithelium line these vesicles and the mucous membrane is studded with the orifices of mucous tubular glands and lays in folds, thus greatly increasing its extent. The vesicular walls are thick and trabeculated and contain abundant muscular tissue.

The author takes issue with the general belief that the seminal vesicles are reservoirs for storing the spermatozoa and that their secretion fructifies and enlivens the spermatic cells. He refers to the researches of Dr. Huntington, who is convinced that the semen [spermatozoa ?] never reaches the seminal vesicles and that their presence in these organs is the result of accidental conditions.

The author alleges that there is no structural mechanism and no known physiological process that could pass the spermatozoa into the vesicles.

Chapter II. relates to the physiology of the male sexual function. Chapter III., Fig. 16, shows the normal secretion of the seminal vesicles loaded with spermatozoa. [How did they get there ? Did they climb in out of respect for the opinion of Dr. Fuller ?] The author says it is doubtful whether there is a special nerve center for ejaculation. Fuller says that a so-called sexual nerve center in the lumbar spine has the chief control of ejaculation.

The erotic impression and erection of the penis arouses the testicles into increased functional activity. During sexual erethism the testicles are drawn up to the internal abdominal rings, and synchronously semen [spermatozoa ?] escapes from the coni vasculosi and reaches the vasa, carried forward by the powerful rhythmical contraction of the strong muscular fibers surrounding these tubes, and that they are forced into the ampulla, which, becoming distended, causes rhythmic contraction synchronously with the seminal vesicle, and the contents of these structures meet for the first time in the ejaculatory ducts.

It is estimated that there are from 250,000,000 to 400,000,000 spermatozoa thrown out with every ejaculation. Such a rush

must cause crowding in the bristle-sized lumen of the vasa deferentia.

The elaboration by the testicles of such highly organised product as spermatozoa and their passage through the coni vasculosi, vasa, ejaculatory ducts and urethra would seem to require more time than the ordinary sexual act. The views of Fuller and Taylor are widely at variance, and both should be read to be appreciated. The question is, do the seminal vesicles store the spermatozoa?

The semen is a composite liquid, made up of the combined secretions of the testicles, seminal vesicles, prostate gland, Cowper's glands and the muciporous glands of the urethra.

Impotence in the male is divided into four classes: (1) Psychical; (2) symptomatic; (3) atonic; (4) organic.

Epididymitis.—As a result of bilateral gonorrheal epididymitis, a man may be sterile without losing his virility.

Conclusions.—(1) In all cases of unilateral epididymitis treatment should not cease with the decline of the acute stage; (2) bilateral epididymitis should receive energetic and long-continued treatment; (3) prognosis in recent cases is very favorable for a perfect cure; orchitis as a complication of gonorrheal epididymitis is rare and usually quickly disappears.

Chapter XVI.—Chronic inflammation of the bulbous and prostatic urethra. The gonorrheal process in the bulbous urethra is very chronic, persistent and rebellious. There may be no visible secretion or it may be very copious. Its earlier stage is characterised by a slight discharge, threads and uneasy or burning sensation. The bulbous urethra, owing to its different anatomical formation and environment, is often profoundly affected by the gonorrheal process. Inodular stricture forms sooner or later and the parts become rigid and stenotic; urination is obstructed, and the sexual function impaired or lost.

Chronic posterior urethritis may exist for five or twenty years, unknown, as a gonorrheal sequelæ, to its possessor and unrecognised by his physician. Its victim is subject to exacerbations of urethritis, following excesses, and as these recrudescences readily subside, little or no attention is given to it until sexual weakness, hematuria or some other prominent symptom attracts attention.

For local treatment deep injections are applied after the manner proposed by Ultzman, and if the case is very rebellious thirty to sixty grains of nitrate of silver to the ounce of water is applied through the endoscope with a porte remède.

The following chapters relate to various other maladies which afflict the genital system.

This volume is illustrated by some new and original cuts, the personal work of the author, whose resources are fortified by great experience and close observation.

It is a fine specimen of the printer's art. B. H. D.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By JOHN V. SHOEMAKER, M. D., LL. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia; Physician to the Philadelphia Hospital for Diseases of the Skin; Member of the American Medical Association; of the Pennsylvania and Minnesota State Medical Societies; of the American Academy of Medicine, and of the British Medical Association; Fellow of the Medical Society of London. Third edition, revised and enlarged with chromogravure plates and other illustrations. New York: D. Appleton & Company. 1897.

This large and elaborate work, which constitutes the third edition of the author's Practical treatise of diseases of the skin, contains an enormous amount of well-arranged information regarding skin affections. When we point out that the volume consists of a well-bound book of some 894 pages, a fair notion may be obtained of the bulk of the work and the labor expended in its production.

The treatise has been planned with certain limitations, and is especially devoted to the consideration of the symptomatology, diagnosis, etiology and treatment. The author has happily avoided historical sketches, solely treating the subject matter from the standpoint of the general pathologist and, furthermore, he has emphasised the most notable recent views of the various writers upon these topics which have commended themselves as of practical value.

The classification adopted is a modification of the one promulgated by Hebra, including disorders of secretion and excretion, hyperemias, hemorrhages, hypertrophies, atrophies, tumors, neuroses and parasites. The anatomy and physiology of the skin and its appendages is considered in thirty-seven pages, thoroughly worked up to date and freely illustrated. Another feature, which considerably increases the number of pages, is a valuable and extensive formulary in the concluding portion of the volume.

The illustrations, although not profuse, on the whole are good and the colored plates of psoriasis, dermatitis venenata, and alopecia circumscripta are decidedly admirable. The work will prove of value both to the advanced student and to the practitioner who wishes to renew his acquaintance with dermatology from the modern standpoint. E. W.

A TREATISE ON GYNECOLOGY, MEDICAL AND SURGICAL. By DR. S. POZZI, of Paris. Third, revised edition. Translated by Dr. Brooks H. Wells, of New York. One volume, of 950 pages, royal octavo, illustrated by over 600 wood engravings. New York: William Wood & Co. 1897.

The first American edition of this work was published in 1891 in two volumes, and received extended notice in the JOURNAL, volume XXXI., new series, pp. 630 and 695. It was translated as is this edition by Dr. Wells, and was considered a decided contri-

bution to the literature of gynecology. As an indication of the estimation placed upon Pozzi's treatise we may mention that it has been translated into the German, English, Spanish, Italian and Russian languages; and it has also received the prizes of the Institute and the Academy of Medicine of Paris.

This is a translation of the third French edition, which has been thoroughly revised and to which many additions have been made. A few of the chapters, too, have been entirely rewritten. The subject of uterine fibroids, including their treatment by abdominal and vaginal hysterectomy, has been considered with especial care in the light of recent contributions to the subject. Pozzi's illustrations of fibromata and especially of the operations for their relief are particularly attractive as well as instructive.

All through the work are additions made by the American translator that contribute to the value of the text and serves to bring it forward to the latest period. These are included in brackets, making them readily distinguishable from the author's text. Some of the pathological anatomy is new and is illustrated by plates made from original drawings, notably that pertaining to ovarian cysts. We think the work has been greatly enhanced in value by the improvements we have noted and again by the fact that it is condensed into one volume.

The proficient teacher and practiser of gynecology must be in possession of literature from all parts of the globe, and especially of that of the French school, which has made important advances of late. No library, today, is complete that does not include Pozzi's treatise. It is beautifully printed and well dressed.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS, with especial reference to the application of Remedial Measures to Disease and their Employment upon a Rational Basis. By HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, etc. With special chapters by Drs. George E. de Schweinitz, Edward Martin and Barton C. Hirst. Sixth edition, thoroughly revised and largely rewritten. In one octavo volume of 756 pages. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

To write a book and prepare five more editions of it, six editions in all, within a period of seven years would keep most authors almost constantly occupied. But Dr. Hare has such a capacity for work, literary and clinical, that he has not only done this but has published many other treatises besides during the period mentioned. The remarkable feature of Dr. Hare's writings is that they contain well-digested facts or logical theories concisely stated and practically arranged. In other words, his books are not padded with verbosities and visionary propositions, but are written by a practical man and an accomplished teacher for practical physicians.

One of the most difficult problems in medicine, next in import-

ance to diagnosis, is the application of remedies to the treatment of disease — practical therapeutics. It is oftentimes equally important to know when to withhold drugs, and this latter is one of the most perplexing lessons for the young doctor to learn. It would be well if every young physician would frame the motto that faces the title page of this book, original with the author, and hang it in a conspicuous place as a constant reminder of duty. It reads as follows: "When called to guide a patient through an illness the physician should be constantly a watchman, and a therapeutist only when necessity arises."

In preparing this sixth edition for the press the author has rewritten a considerable portion of the text and he has also arranged the work so as to make it useful in connection with his text-book of practical diagnosis, a notice of which appears coincidently with this one, though written more than a month previously.

The author has commendingly excluded from this treatise "remedies which are so rarely employed as to be only curiosities," and the space so saved is filled with details of the "application of well-tried remedies, both new and old."

There can be no two opinions over the fact that this is one of the best practical treatises on therapeutics extant and it should be in the hands of every student, clinician and family doctor.

SKIN DISEASES OF CHILDREN. By GEORGE HENRY FOX, A. M., M. D., Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York; Physician to the New York Skin and Cancer Hospital, etc. With twelve photogravure and chromographic plates and sixty illustrations in the text. New York: William Wood & Company. 1897.

The volume before us deals with those diseases of the skin most frequently met with in infancy and early life. The first portion of the work is occupied by a concise and careful description of the maladies which so many times cause sudden alarm in a household and which the busy practitioner is so often called upon to diagnosticate and treat off-hand, to decide whether that signal of distress be well or ill-founded, whether the difficulty is or is not contagious.

The symptomatology of the individual articles all strike the reader at once as being clear, quite complete and thoroughly modern, while the treatment is eminently practical and fully considered under the heading of each disease, but for greater convenience of reference and comparison, remedies and methods of treatment are formulated and systematised in the concluding portion of the work.

As to the photogravure and chromographic plates, we have nothing to say that is not laudatory; the plates illustrating alopecia areata, ichthyosis and syphilis hereditaria are, in our opinion, the gems of the book. E. W.

AN EPITOME OF THE HISTORY OF MEDICINE. By ROSWELL PARK, A. M., M. D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Illustrated with portraits and other engravings. One volume, royal octavo, pages xiv.—348. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street; New York: 117 W. Forty-second street; Chicago: 9 Lakeside Building.

It is essential for every intelligent physician to acquire a reasonable knowledge of the history of medicine. As a general rule the undergraduate has been in hot haste to obtain his degree and license that he may be enabled to proceed at once to the practice of his profession. He has been more interested in the commercial side of his profession than in its literary aspect—caring less for history than for shekels. For this condition of things pupils are not wholly to blame, but medical faculties must be made to share with them in the opprobrium. If the latter would take more pains to teach students something of accomplishments and help them to cultivate a taste for the esthetics of medicine, there would be less rudeness in their manners as they emerge from the lecture rooms, and more gentlemanly conduct in their bearing when they leave the halls of their alma mater and mingle with the world as physicians.

The work before us, which is the outgrowth of a course of lectures delivered by Dr. Park at the University of Buffalo, is a commendable effort in the direction that we have hinted at in the foregoing paragraph. Heretofore it has been difficult for a busy physician, and still more difficult for medical students, to obtain a concise historical account of medicine from the primitive period to our own times. It is one of the chief advantages of this book, and one that will readily command for it respect and a large audience, that it tells in pleasant form and attractive rhetoric the story of medical history from beginning to end.

The profession of medicine will be made better, stronger and cleaner by the possession and perusal of such books as this. It is refreshing to find in this period of haste, unrest and eager chase for gain such a book written by a busy doctor. It should be in possession of every physician, especially every young doctor. The book is well printed and otherwise presented in attractive form.

PRACTICAL DIAGNOSIS. The Use of Symptoms in the Diagnosis of Disease. By HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. New (second) and revised edition. In one octavo volume of 598 pages, with 201 engravings and thirteen full-page colored plates. Philadelphia: Lea Brothers & Co., Publishers. 1897.

The sudden exhaustion of the first edition of this unique treatise in a little more than a year from its appearance has rendered the publication of a second edition necessary. This has afforded the distinguished author an opportunity for revision, of

which he gladly availed himself. It must be confessed, however, that the faults of the first edition were comparatively few: but in a progressive science even a year develops improvements, and such as have occurred are added in this book.

We devoted considerable space to a review notice of the first edition in our issue of January, 1897, Vol. XXXVI., No. 6, page 470. The particular object of this work was to become a guide at the bedside. That it fulfilled its mission is indicated by the fact that the profession is demanding the work even after it is out of press. An author must feel such a compliment markedly. So many books are printed that never reach a second edition—indeed, ought never to have seen the first—that it is refreshing to come across a book of this character. Hare is a voluminous writer, but he always writes to some purpose, never for the mere grouping of words. He is destined to become one of the foremost clinicians in the country.

The index of this book is remarkable, embracing, as it does, forty-six pages and giving symptoms as well as diseases, so that the searcher is sure to find what he needs. Every student, every teacher, every practitioner of medicine, should become familiar with this treatise.

Twelfth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Benjamin B. Lee, M. D., Secretary. Volumes I. and II. 1896.

The Keystone state publishes a creditable report of its health department. In the annual report of the secretary to the board reference is made to the work of Dr. Lucien Howe, of Buffalo, in his endeavors to establish the Credé method for the prevention of blindness in infants.

The expenses of the conduct of the office during the year 1896 were about $4,000. How it is possible for a state health board to do efficient work with such a small expenditure is beyond our understanding. A state the size of Pennsylvania ought to place at the disposal of its board of health at least $100,000. The time has passed when the importance of health boards can be belittled. They play a most important function in the rôle of preventive medicine. The best talent that the state can command should be placed at its disposal and an adequate compensation should be paid to its officials.

Pennsylvania is, indeed, fortunate in obtaining so able and efficient a secretary as is Dr. Lee, and when we are told in this report that his traveling and office expenses for a year were only $1,886.56, we can but feel that his distinguished services are very meagerly paid for by the state.

In this volume Dr. Lee presents a very elaborate report relating to the meeting of the American Public Health Association at Buffalo in 1896. As we stated at the outset, this report is highly creditable in all its details.

BOOKS RECEIVED.

A Manual of Obstetrics. By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (seventh) edition. In one 12mo volume of 573 pages, with 223 illustrations. Cloth, $2.50. Lea Brothers & Co., Publishers, Philadelphia and New York. 1898.

Elements of Latin. For students of medicine and pharmacy. By George D. Crothers, A. M., M. D., Teacher of Latin and Greek in the St. Joseph (Mo.) High School; and Hiram H. Bice, A. M., Instructor in Latin and Greek in the Boys' High School of New York City. Pages xii.—242. Cloth, $1.25 net. Philadelphia, New York City, Chicago: The F. A. Davis Co., Publishers.

Outlines of Rural Hygiene. For Physicians, Students and Sanitarians. By Harvey B. Bashore, M. D., Inspector for the State Board of Health of Pennsylvania. With an appendix on The Normal Distribution of Chlorine, by Prof. Herbert E. Smith, of Yale University. Illustrated with twenty (20) engravings. Pages vi.–84. Cloth, 75 cents net. Philadelphia, New York City, Chicago: The F. A. Davis Co., Publishers.

Proceedings of the United States Veterinary Medical Association. Session of 1897. Thirty-fourth annual meeting held at Nashville, September 7, 8 and 9, 1897. Edited by the publication committee, W. L. Williams, Chairman, Cornell University, Ithaca, N. Y.

Transactions of the American Microscopical Society. Twentieth annual meeting, held at Toledo, O., August 5, 6 and 7, 1897. William C. Krauss, M. D., Secretary.

Transactions of the National Confederation of State Medical Examining and Licensing Boards. Seventh annual meeting, held at Philadelphia, Pa., May 31, 1897. A. Walter Suiter, M. D., Secretary.

Transactions of the Oregon State Medical Society. Twenty-fourth annual meeting, held at Portland, Oregon, June 8 and 9, 1897. William F. Amos, M. D., Secretary.

Literary Notes.

W. B. Saunders, medical publisher, announces the following books to issue during 1898: An American text-book of genito-urinary and skin diseases, by Bangs and Hardaway; Lehmann medicinische Handatlanten; Surgical diagnosis and treatment, by Macdonald; Orthopedic surgery, by Moore; Diseases of the stomach, by Van Valzah and Nisbet; The surgical complications and sequels of typhoid fever, by Keen; A compendium of insanity, by Chapin; The American year-book of medicine and surgery, by Gould.

The *Philadelphia Medical Journal* made its first appearance January 1, 1898, in accordance with the announcement made in these

pages in December. In size it is a large double-column quarto and in arrangement it reverses the usual order beginning with editorial matter, and then follow selections, news notes, latest literature and finally original articles. The experience of Dr. Gould as an editor and literateur justifies the belief that his new journal will assume a foremost place among the American medical weeklies.

The *Microscope* has been discontinued and the *American Monthly Microscopical Journal* will be supplied to all those who wish it. The latter will be a 16-page illustrated magazine, confined to the subject of microscopy, omitting contributions to biology, publishing no long articles, but desiring abstracts, news and brief reports of interesting events. Address the publisher, Charles W. Smiley, Washington, D. C.

The *Medical Age* has appeared in a new dress, which improves it in every way. It is now edited by Dr. Frederick W. Mann, who has experience in medical journal work. We offer our congratulations to this sterling semi-monthly magazine.

The *International Medical Annual*, published by E. B. Treat & Co., will issue its sixteenth edition (1898) at an early day. It will contain many special articles of great interest—in addition to the regular summaries of the year's work in medicine and surgery, by thirty-eight editors, each contributing to the department with which he is especially identified. It will contain about 700 pages and will be copiously illustrated, including thirty-six full-page plates, twelve of which are finely colored. Price, $3.00 net, post free. Address the publishers, E. B. Treat & Co., 241–243 West 23d street, New York.

Items.

The sixth annual report of the Sheppard Asylum, a hospital for mental diseases, located at Towson, Maryland, is a handsome and well-illustrated brochure. Interest has increased in this institution since Mr. Enoch Pratt's bequest, a gift that will double the capital and increase the scope and usefulness of the institution. The trustees have wisely accepted the trust and all that remains is for the legis-

lature to perform its part when this will become one of the largest, if not the most useful private hospital for the insane in the country. Dr. Edward N. Brush is the superintendent.

The fifth annual report of the Children's Hospital at Buffalo is an interesting little pamphlet. In it we read that Dr. Schuyler Wheeler, of New York, gave the hospital a $5,000 endowment in memory of his little son Richard. In addition Dr. Wheeler has fitted up one of the small rooms in a most complete manner, making it attractive with dainty furnishings in blue and white, and in which a memorial window is to be placed, made by Tiffany. The nurse's home, attached to the hospital, has been freed from debt by the payment during the year of $2,000. Taken altogether this little hospital is doing most creditable work and is a charity that appeals to the sympathy of every human heart.

Dr. G. A. Stockwell, formerly employed by Parke, Davis & Company, Detroit, has entered the service of Henry K. Wampole & Company, Philadelphia. Dr. Stockwell announces that he will probably soon issue a new high-class and wholly independent medical journal that will be entirely separate from his connection with the Philadelphia house.

Mathews's *Quarterly Journal of Rectal and Gastro-Intestinal Diseases* announces that it will conduct a special train from St. Louis to Denver for the accommodation of persons who desire to attend the meeting of the American Medical Association in June, 1898. Further information regarding the proposed train can be had by addressing the Quarterly special, P. O. Box 434, Louisville, Ky.

The Chutmuck Special is the name of a train that the Missouri Pacific Railway has arranged to run from St. Louis to Denver for the meeting of the American Medical Association in June, '98, Information may be obtained by addressing Col. H. C. Townsend, general passenger and ticket agent, St. Louis, Mo.

The second annual report of the managers of the Second Hospital for the Insane of the State of Maryland for the year ending October 1, 1897, is received. The construction of new buildings is

proceeding, the first group being finished. It consists of a service building and three cottages arranged on the crest of a knoll surrounding a large open space. The location on the old Patterson farm at Sykesville is as near ideal as can be. About fifty patients have been treated during the past year and many more will be provided for as the buildings progress. Dr. George H. Rohé is the superintendent.

The Clyde Line fleet of steamships plying between New York, Charleston, S. C., and Jacksonville, Florida, are, without doubt, the smoothest sailing vessels between the North and South. Built by expert ship-builders, regardless of cost, they are the safest and most comfortable steamers in the coastwise trade. The staterooms are commodious, airy and elegantly furnished.

The tables on the various steamers are furnished with all the delicacies that the most fastidious can expect. When one takes into consideration that both the Northern and Southern markets are at the command of the Clyde Line, it is no wonder that they have the reputation for furnishing the best meals that money can buy.

An International health exposition will be held at Grand Central Palace, New York city, for five weeks beginning April 25, 1898. This will be an exhibit of foods, sanitary appliances, systems of house heating, ventilation and plumbing, hospital arrangements, systems of sewerage, model school rooms, model tenement houses, electric apparatus and the like.

The list of the advisory board already appointed comprises more than ninety specialties in the various lines of sanitary work, among whom may be mentioned: Dr. Stephen Smith, president department public charities, New York; Hon. Andrew H. Green; Albert Shaw, editor *Review of Reviews*; Edward Atkinson, Alfred T. White, ex-commissioner of public works, city of Brooklyn; Samuel Gompers, president American federation of labor; Miss Frances E. Willard, president W. C. T. U.; Dr. H. W. Wiley and B. G. Fernow of the U. S. department of agriculture; Mrs. Melville Dewey; Col. Wm. G. Church, editor of the *Army and Navy Journal*; Dr. H. P. Baker, secretary Michigan state board of health; Dr. Mary Putnam Jacobi; Dr. George F. Shrady, editor *Medical Record*.

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Original Communications.

THE VALUE OF EXPERT TESTIMONY IN MEDICO-LEGAL CASES—FROM THE LEGAL STANDPOINT.[1]

BY TRACY C. BECKER, ESQ., Buffalo, N. Y.

I ASSUME that I am to discuss the value of expert testimony in courts of justice and the first question is, what do we mean by expert testimony? It is, in brief, opinion evidence; a statement of matters of opinion as distinguished from matters of fact. There are many kinds of expert testimony besides the testimony of expert medical men. The border line between the statement of a fact and the statement of an opinion, based upon facts as the result of observation, is a wavering one. As I have pointed out in another place (Witthaus and Becker's Medical Jurisprudence, etc., Vol. I., Chap. V., p. 50,) there are many statements made by witnesses upon the stand which are matters of opinion, although we call them and treat them as matters of fact; such as, for instance, the statement that a man was intoxicated; or, quite as important, quite as familiar an example, matters of identity. Lay witnesses testify constantly to meeting a person and identifying him. All questions of proving an alibi rest upon that class of evidence, which is really nothing but opinion evidence. And so, without enumerating all the occasions on which testimony is given which involves the expression of opinions, we must assume at the start, I think, that you cannot frame any law, nor can you frame any definition concerning expert testimony, based solely on the declaration that it is merely opinion evidence. All kinds of expert testimony are essential to the administration of justice, because our final tribunal on questions of fact, the jury, is made up of men taken from the body of society. They are men of ordinary education and

1. Presented at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

experience and are always, and unavoidably so, without any special scientific training or knowledge concerning the matters which they are to determine and concerning which expert testimony, in the common acceptation of the term, is permitted. This is the reason why expert testimony is allowed, and it is necessary or it never would have been allowed, for it is an exception to the general rule that in courts of law only such evidence is admissible as directly tends to prove or disprove the existence of a fact under consideration. One man's opinion is, generally speaking, as good as another's, unless he has had more extensive training and acquired superior skill and knowledge which enable him to form a more accurate judgment and a sounder judgment. In short, the value of an expert's opinion depends upon three factors: first, what is his own value, meaning his ability and his honesty; second, what are the established facts in the case upon which he bases his opinion; and third, what have been his opportunities for examination of those facts?

This brings us to the consideration of the question, what value have expert witnesses? And if not so great a value as they ought to have, why is it so and what is the remedy?

In discussing this question and presenting the information which I have obtained upon the subject from the highest experts in our profession—namely, the judges of our courts, particularly of our supreme court, I have assumed, and these judges have in the main assumed, that by an expert witness we mean a medical witness, and that upon general questions of science and skill and the like, it is not possible at present to formulate any just regulation of his status. Many letters from the judges were written to me in confidence. Those which have been so written I shall be obliged to withhold, but others have not been written under any seal of confidence. They have been written with knowledge that they would be used on this occasion, and I take the liberty of reading some excerpts from them, not in full, as your time will not permit it, but I presume that if it is within the rules of your society they will be published in full at the proper time and in the proper place.

As it is customary for the junior judges in delivering opinions to be called upon first, I will read a brief letter from Judge Cohen, just appointed to the supreme court bench in the city of New York. Judge William N. Cohen, who in his profession stood very high as an able, distinguished and conservative lawyer, writes:

NEW YORK, October 17, 1897.

Tracy C. Becker, Esq., Buffalo, N. Y.:

DEAR SIR—I have rather decided views on the subject referred to, believing it to be the rule that such testimony is quite valueless and that it is essential to eliminate that such witnesses are *retained* in order that proper and just weight may be given to it.

Very truly yours, WM. N. COHEN.

The venerable Judge McAdam, of New York City, writes:

NEW YORK, October 16, 1897.

Tracy C. Becker, Esq.:

DEAR SIR—So much has been written on the subject of expert testimony in medico-legal cases that it is impossible for me to add anything of value. If experts in such matters could be induced to agree, their testimony would be invaluable, because settling the question at hand; but when they disagree, and they often do, its value is so much impaired that lay minds generally apply their own experience and determine the question according to their own judgment, so that in the end the laity prevail and miscarriage of justice is often the result. This is particularly so in insanity cases. Would it were otherwise.

Yours truly, DAVID McADAM.

Judge Werner, of Rochester, who has given this subject much thought and attention, writes as follows:

ROCHESTER, N. Y., October 18, 1897.

Hon. Tracy C. Becker, Buffalo, N. Y.:

DEAR SIR—Since writing you the other day I have given the subject of remedial legislation, in regard to expert testimony, considerable thought, but have arrived at no satisfactory conclusion. The evils attending the present method of eliciting medical expert testimony are obvious, but the remedies for these evils are not so apparent. We no doubt all agree upon three fundamental propositions: first, that medical expert testimony is practically indispensable in certain cases; second, that the present methods of eliciting such testimony are entirely unsatisfactory; third, that the proper and expeditious administration of justice, as well as the good name of the medical profession, require some reform in these methods.

The evils of the present system which obtrude themselves upon the notice of the two professions and of the public are, first, that experts who are employed upon one side of a case or upon the other, become sometimes unconsciously, and more often deliberately, partisans who are as interested and zealous as the lawyers themselves in behalf of the theories for which they contend; second, the efforts of counsel on whose side the experts are employed to elicit not the whole truth, but

only such facts as will help their side of the case; third, the tedious and often senseless cross-examination, due in some instances to a lack of previous knowledge on the part of counsel as to theories which are to be advanced by the medical experts, and in others to a lack of preparation and understanding on the part of counsel upon the real medical questions at issue, in either event resulting in great waste of time and usually serving to befog rather than to enlighten courts and juries.

As I have already suggested, it is exceedingly difficult and it may be impossible to provide a satisfactory remedy. It has occurred to me that in criminal cases where the alleged insanity of the defendant, or the employment by him of unlawful methods to effect death or injury, which are the subject of expert medical knowledge, are the questions at issue, the problem might be solved by the enactment of a law providing for the appointment by the court of a commission consisting of not less than three physicians, and in capital cases of not more than five, whose compensation shall be fixed and certified by the court and paid by the county in which the trial is held. The report of the commission, or in case of failure to agree as many different reports as there may be, to be filed a given number of days before the trial in the office of the clerk of the county where the trial is to take place. Upon the trial such reports to be read by one of the persons subscribing the same and each member of the commission to be called for such further explanatory or cross-examination as may be desired. The jury to pass upon such evidence as at present. Counsel on either side to have the right to examine the report or reports after it is filed and before the trial. No physician or expert to be appointed upon a commission by the suggestion of counsel on either side.

I submit this hasty and crude suggestion in the hope that it may point the way to something more satisfactory.

In several cases the problem is immeasurably more complicated. I assume that it will be impracticable to exclude from the witness stand the attending physician or physicians of a plaintiff whose injuries or illness are alleged to be due to the negligence of a defendant. When such physician or physicians are called they are invariably treated as experts. In such case there is no escape from the conclusion that a defendant has the right to rebut their evidence by further expert testimony. The physical examination now provided for by the code is a step in the right direction; but it is open to the objection that the physicians making the examination are appointed upon the suggestion and nomination of the defendant.

It occurs to me that this matter might be simplified somewhat by providing that in every action for damages, on account of alleged negligence of a defendant, plaintiff shall be required within twenty days after the cause is at issue to make a motion to the court, upon notice to the other side, for leave to take the testimony of the attending physi-

cians before a referee, whose fees shall be at the statutory rate and be paid by the county in which the trial is had. That opposing counsel may be present and cross-examine the witnesses on the hearing before such referee. That the testimony so taken shall be read in open court and all objections to questions passed upon by the court before the answer is read in the presence of the jury. That in addition to this, either party may, at the time when the motion is made for leave to take such testimony, apply for a physical examination of the plaintiff by not more than three physicians, whose report shall be filed with the clerk of the county at least a given number of days before the beginning of the term for which the case is first placed upon the calendar; such report to be open to the inspection of counsel on both sides and the physicians making the same to be called for such further or explanatory evidence as may be desired.

To meet the contingency that in some cases the parties might have more than three attending physicians, it might be advisable to limit the number of attending physicians to be called to three, or if that is impossible, then to increase the number of physicians to be appointed by the court for physical examination to the same number as the attending physicians. I think it will be conceded that even if under some such a plan as this the same number of physicians were called, as under the present system, it would take much less time to adduce their evidence in open court than at present.

In conclusion I must apologise for these very unsatisfactory suggestions. While I have given the subject some thought, the difficulties in the way of improvement were not clearly presented to my mind until I received your letter. The pressure of other duties since then has made it impossible for me to devote as much time to it as I would like. Trusting that this tardy response to your letter may not be too late and that it may be of some slight assistance to you, I remain,

Sincerely yours, W. E. WERNER.

Judge Titus, of Buffalo, who has served many years upon our supreme bench and has had a great deal of experience both in criminal and civil cases, writes as follows :

BUFFALO, N. Y., October 13, 1897.

Tracy C. Becker, Esq. :

DEAR SIR—Your favor of the 12th inst., in which you say you are to take part in a discussion before the Medical Association of Central New York in this city, October 18th, on the question of the value of expert testimony in medico-legal cases, and asking my views on the subject, came duly to hand.

It is generally conceded by the profession, that such testimony under the present system of giving it,—each party procuring witnesses

favorable to himself and paying for their services,—is not only valueless but absolutely immoral in its tendency. I speak from common observation when I say that such witnesses are influenced largely by their employment and often to such an extent as to become zealous partisans of the party employing them, and in many cases under the guise of expressing an opinion, I believe, commit perjury, and it cannot be corrected too soon.

I know of no way of accomplishing this unless by legislative enactment, which should, in substance, provide that in all cases where medical testimony is to be used parties should be required to make application to the court, on notice to the opposing party, for the appointment of two or more learned men in the medical profession to make an examination of the subject or person and report to the court, with the privilege to either party to call such experts, without any other compensation than such a reasonable sum as shall be fixed by the court, not exceeding a specified allowance per day, say $20, which sum so fixed should be paid by the county.

I have not given sufficient thought to the remedy for the evil which we all recognise to give advice upon this subject and my ideas are somewhat crude, but I believe great good can be accomplished by legislation along the lines I have indicated.

Yours truly, ROBERT C. TITUS.

Judge Goodrich, of Brooklyn, writes as follows :

BROOKLYN, October 14, 1898.

Tracy C. Becker, Esq. :

DEAR SIR—Yours of the 12th received. The only suggestion which my limited leisure allows me to suggest was one which I made to a cognate society in New York last winter in an after-dinner speech—that there ought to be public experts appointed by the governor. This to save the ridiculous experience which all of us have seen of paid experts in criminal cases swearing for or against the sanity of a prisoner, according to the amount of their fee and the person who calls them.

Yours truly, W. W. GOODRICH.

Judge Gerrit A. Forbes, who has also been quite a number of years upon the bench and has a large experience in cases involving the giving of expert testimony, writes as follows :

CANASTOTA, N. Y., October 14, 1897.

Tracy C. Becker, Esq., Buffalo, N. Y. :

DEAR SIR—I wrote a letter recently to some one (I don't now remember whom) approving to the fullest extent the attempt to secure legislation and the appointment of commissioners to be used by the court in producing expert testimony in medico-legal cases.

I am convinced that such legislation would be of great and valuable service to the bench as well as to the bar; first, for the reason that competent persons would be selected, and secondly, that the commissioners would be nonpartisan. The danger has always been that the expert, when called by a party to testify, in too many cases becomes partisan and for the compensation which he receives tries to make his services valuable to his employer to the exclusion of the other side, and juries have less faith in that class of testimony for that reason.

There are a great many high-minded men who are called as legal experts and to whom the court readily gives credit, but the jury isn't always so certain to give them the credit which they deserve. There are very few instances of the other kind, I am glad to say, and the court seldom has any difficulty in distinguishing the right from the wrong class. Sincerely yours, GERRIT A. FORBES.

Judge Adams, of Canandaigua, a distinguished member of the appellate division of the supreme court, who has had very large experience both as a practitioner at the bar and upon the bench in cases involving the use of expert testimony, writes:

CANANDAIGUA, N. Y., October 18, 1897.

Hon. Tracy C. Becker, Buffalo, N. Y.:

DEAR SIR—Your letter of the 12th inst. reached here while I was engaged in the performance of my official duties at Rochester and from which, as you know, I was not relieved until Friday evening. Consequently I have had no opportunity to give any attention to the subject-matter of your inquiry until today.

The unreliability of expert testimony is certainly something which demands careful consideration at the hands of every serious-minded and thoughtful member of the profession. For it must be apparent to even the casual observer that so-called expert witnesses oftentimes fall far short of furnishing evidence which is entitled to the slightest consideration, or which may be regarded as at all helpful to either courts or juries. This condition of affairs, I am inclined to think, arises from the fact that the moment an expert is employed in a given case he identifies himself with his employer and in a very short time, unconsciously perhaps, becomes such an extreme partisan that his testimony amounts to little more than an argument in support of his client's cause. Indeed it often happens, as you very well know, that "expert witnesses" are far more anxious to destroy each other than they are to elucidate the particular question to which their attention has been directed. And therefore it is, as was said by a distinguished member of the bench in an elaborate opinion quite recently written, that

If it should appear that his (the expert's) opinion is formed without the aid of facts necessary to enable him to come to a conclusion, that

opinion may be disregarded however confidently it is testified to by the witness. (Justice Rumsey in Weber vs. 3d Ave. R. R. Co., 12 App. Div., 512–515.)

But it is unnecessary to dilate further upon the unreliability of expert testimony, which every lawyer of experience recognises and deplores; the real question being, what remedy can be applied to the evil?—and as to that I hardly know what to say.

It has been suggested that a certain number of experts should be employed and paid by the state, upon the supposition that this would deprive them of any motive for bias in their opinions. While this proposition possesses some commendable features, it seems to me for obvious reasons wholly impracticable, and therefore I am not prepared at present to advise its adoption; and, at the same time, I have no other plan to suggest, unless it be for the courts to continue their denunciation of so-called expert testimony until a public sentiment is aroused which shall be sufficiently potent to compel experts to mend their ways and to aid rather than deter the proper administration of justice.

I shall be interested in the outcome of your discussion, and if it results in proposing some legislation on the subject, shall be glad to know what it is.

Regretting that I cannot be of some assistance to you, although I am sure you do not require any, I remain,

Yours very sincerely, WILLIAM H. ADAMS.

Judge Rumsey, whose opinion as a member of the appellate division in the first department was just quoted by Judge Adams, who stands high as a member of the bench of this state and also as a text-writer, writes as follows:

BATH, N. Y., October 16, 1897.

Hon. Tracy C. Becker:

DEAR SIR—I received your letter of October 12th and I have been somewhat at a loss just how to answer it. I have a pretty decided opinion about the value, or rather the worthlessness, in most cases of so-called expert evidence. I do not mean by this to say that I discredit or undervalue the sworn opinion of an unbiased witness, not subsidised by either side but simply testifying to his honest judgment upon the facts which he has observed or which are presented to him, but unfortunately such expert testimony is very seldom given. As we all know, an expert witness is a man who has been consulted by the side for whom he is sworn, often retained by them, and who understands that it is a part of his contract to so present the facts, or present only such facts, as will sustain the opinion favorable to his client, and to state that opinion to the jury under his oath; the sole difference between him and an advocate being that he makes his argument under oath and that he endeavors to add the weight of the oath to the opinion of the advocate.

Such testimony is, in my judgment, not only to be discredited, but it is discreditable. In a very considerable experience as a lawyer and a judge I have seen a good deal of that sort of thing and I am of opinion that it is not only becoming a crying evil and a danger in the administration of justice, but a disgrace. It is almost always the case now, that upon every trial where the opinion of witnesses can be of any service, those who are called upon to express opinions deliberately range themselves upon one side or the other and argue, as to the weight to be given to their opinions from the witness stand precisely as counsel argue, standing at the bar. Of course this is all wrong and some means should be taken to remedy it.

More than twenty years ago I drafted a bill which I procured to be offered in the senate, providing for the selection by a judge of certain experts whenever, in any given case, testimony of opinions should be necessary and competent. The substance of it was, that upon motion by either party a judge might select a given number of experts, who should inform themselves in regard to the case and hold themselves in readiness to give testimony ; that these experts must be called by the district attorney ; that they should not be at liberty to consult with either party as to the facts or as to the opinion which they were to give, nor should they be selected upon the nomination of either party. The bill provided further that either party might swear other experts in the usual way, but that those experts should not be entitled to any pay from the people, no matter upon which side they were sworn. The bill, however, failed to go through and I dare say it ought to have done so. I am not prepared to say that any such system is advisable or even practicable. I have thought, however, seriously lately, whether it would not be advisable upon the whole to prohibit by statute the swearing of any subsidised expert witness, but require that if any such person was to be presented to the jury, that he should be at liberty to give his opinion upon the facts which were made to appear by the testimony, with the understanding that he was not swearing to that opinion, but he was making an argument about it, precisely as a lawyer would make an argument upon a question of law, and that his argument, like the argument of counsel, might be rejected by the jury if they saw fit to do so.

I am quite clear that some steps should be taken to limit the present system of examination of experts, and to bring it back to what it used to be when an expert witness was a witness and had not been educated to regard himself as a paid counsel, whose duty it was to win the case if he possibly could do so. If that could not be done, I am rather inclined to think that a better way would be to prove the facts to the jury and allow the expert witness to state his opinion upon the facts and his reason for that opinion, as suggested above, just as any other counsel would ; it being understood that his opinion would have the

same weight and no more as the paid for and unsworn opinion of anybody else. Such a rule might be applied without much bother, as it seems to me, and I have no doubt that it eventually would work a considerable and necessary reform. Yours very truly,

WILLIAM RUMSEY.

Judge Edwin A. Nash, of the seventh judicial district, who is considered one of the most able and conservative of our judges, writes briefly as follows :

AVON, N. Y., October 15, 1897.

My Dear Mr. Becker :

It has been my experience that in medico-legal cases expert testimony is always a great aid to a full understanding of the case. Whether any legislation would prevent the conflict of opinion which we often have between medical experts on one side and the other is something to which I have not given much thought. As medicine is not an exact science it would seem to be impossible to procure a body or committee of physicians who would agree in a case not the subject of demonstration or exact diagnosis.

It seems to me that courts and juries must always be left to exercise their judgment as to the character and standing of the experts called as witnesses on either side, the knowledge they exhibit of their profession and the case, and the degree of candor and fairness with which they give their testimony.

These views will readily occur to you as those which will be entertained on one side of the question as to whether any legislation upon the subject would be at all practicable.

Very truly yours, EDWIN A. NASH.

The venerable Judge Daly of New York, whom we all admire so much, writes as follows :

NEW YORK, October 15, 1897.

My Dear Mr. Becker :

I have only time for a hurried reply to your valued letter of the 12th, so that you may get this before the date fixed for your lecture. In respect of the subject named, I can only say that the difficulties in the way of carrying out any of the schemes of remedial legislation which I have heard or read about, so as not to work injustice, seem to me so great that I am inclined to prefer that the law and practice with regard to medical expert testimony and evidence should be left where it is. There does not seem to be any greater reason for changing it than there is for altering the law with respect to the testimony of experts in the law, in chemistry, engineering, or any other science. Do they not at present stand on about the same footing ?

Yours always, J. F. DALY.

Having read from the expert opinions of our judges, I take the liberty to present a letter from my colleague, Professor Rudolph A. Witthaus, generally estimated by courts and lawyers and by his own profession to be among the most eminent of experts, in the toxological line at least, in this country. He has certainly had vast experience and has been quite as frequently engaged by the state as by the defense in criminal cases. He writes :

NEW YORK, October 14, 1897.

Dear Mr. Becker :

I have yours of 10th inst. asking for an expression of opinion upon the present condition of expert testimony and for remedial suggestions. That our present system is bad, very bad, is patent. It could hardly be made worse. But, unfortunately, it is not, in my opinion, possible to find a complete remedy which is practicable.

Three causes contribute to the just disrepute of expert testimony : (1) The fact that the value of such evidence as is submitted is determined by a jury of persons entirely ignorant of the matters discussed, who are instructed—if they be at all—upon such matters by the experts themselves, and who naturally either determine in favor of that side which produces the greater weight of heavy ordinance, or throw the expert evidence out of consideration entirely. (2) The employment frequently of pushing, blatant, ignorant persons (or even of persons who do not hesitate at plain perjury) as alleged experts, not only by defendants, but even by the state in capital cases. (3) The fact that experts are employed, not by the court, but by the parties in interest or by the prosecuting officers, and that, being so employed, they, although sworn to tell the whole truth, are only permitted to tell such portion thereof as may be of service to the client of the examining counsel. And in this connection I may say that the bar is as much responsible for the existing condition of affairs as the doctors and others. In all my employments I have found the task of keeping the counsel who was to examine me in chief within the bounds of my convictions, much more troublesome and difficult than the most searching cross-examination. The inexperienced or incautious expert has more to fear from the counsel whose client is his own than from the opposing counsel.

I know of but one radical remedy for the present condition of affairs and that I fear can only be reached through an abridgment of the jury privilege, which would, however, operate in the interest of innocent persons in criminal actions and of the rights of those of a civil character. All matters calling for expert evidence should be submitted to a jury or commission of men, themselves experts upon the questions involved, which jury or commission—appointed by the court—should find finally upon such questions. Their finding should be transmitted to the lay jury —the final arbiter upon the entire case—as a fact proven. For instance,

in a case of poisoning, a commission of state officers (with representation of the defendant, if you please,) find that the deceased died from the action of arsenic. The certificate of that fact from such a commission may be accepted by the lay jury, as they would accept the statement of an eye-witness that he saw the defendant fire a pistol, and that with much greater safety to the defendant than if they (as they now do) rely upon their own lack of knowledge of the fact as forming the proof of the fact of death by arsenic.

But all this is a suggestion of that which is practically impossible. I have thought of means of diminishing the present evils—by the creation of state experts and in other ways. But these are all open to the same objections, *i. e.*, that the questions are threshed out in court before lay jurors, incompetent to judge of the merits of the questions involved, who are more deeply influenced by the tricky turn of phrase by an adroit lawyer than by a statement of fact which would be absolutely conclusive to a juror competent to judge.

In sum you may improve the tone of expert evidence somewhat by state regulations and by the same means also facilitate the collection of evidence (as by an improvement in the coroner system) during the earlier stages of the investigation of criminal cases, but the expert will only occupy his proper place in medical jurisprudence when his statements are weighed by a jury who can understand his language and know whereof he is speaking. Yours very truly,

R. A. WITTHAUS.

If I may be permitted to add a few words to what has been so well said, I will say this: I do not believe that within constitutional limitations, or within the limitations of justice, it would be practicable for any legislation to be drafted which would exclude from the witness stand witnesses who are witnesses not only for the purpose of giving opinions, but to testify to facts which they observe. In order, in a criminal or a civil case, to make expert testimony of value, it is essential that the expert shall have had an opportunity of examining the subject under consideration. If it be a toxological case, the expert should have had the viscera or the other parts of the body of the deceased in his possession and should have observed them carefully and should have made a chemical analysis of them. If it be of an injury to the person of a dead or live body by a gunshot wound, a stab wound or the like, there are observations of matters of fact which you could not preclude a witness from testifying to if he had the opportunity to make the observations. On the other hand, where you have witnesses who are strictly experts, who are not testifying to both

matters of observation and matters of opinion, but are testifying simply to a hypothetical proposition put to them in the language of counsel, involving the known facts of the case or the facts claimed to be established, on one side or the other, and asking for an opinion, there are no constitutional limitations and, in my judgment, no limitations of practicability or of justice which would prevent requiring such witnesses to be taken from a commission or a board created by law, under the sanction of the law and appointed by some proper appointing power. Just how that could be worked out, as the law now stands, and as the practice now stands and custom and usage now prevail, is a very serious question. There is an element of politics that is liable to enter into a proposition of that kind, which might be infinitely dangerous. Where I had at one time hoped that this whole subject, so far as the criminal side is concerned and to a certain extent in negligence cases, might be worked out, was through a reformation of our coroners' system. For that reason, after considerable thought upon the subject and consultation with eminent members of my own profession and of yours, I did all that I could in the constitutional convention to secure an amendment taking the office of coroner out of the constitution, so that the legislature might substitute something else in place of the present antiquated and useless, if I may use the expression, system of coroners' examinations. The constitutional convention did adopt such an amendment and the people ratified it at the polls and at the next session of the legislature, or the second one after that, a bill was presented, which I drafted, with the assistance of Dr. Witthaus and of the committee on legislation of your state medical society, and of the homeopathic state medical society. This bill died in committee. At the next session (1896) another bill was prepared, under the auspices of the same committees and the same gentlemen, and with the very able assistance of Judge D. Cady Herrick, of Albany. I have a copy of that bill before me. I will not read it to you, but will leave it to be printed in your Transactions, because it embodies what, after a long and careful deliberation, with due regard to the existing conditions and also with due regard to what was practicable politically, as we believed, we drafted and presented to the legislature in the way of a bill, which was as follows :

STATE OF NEW YORK.

No. 906. Int. 752.

In Assembly,
February 14, 1896.

Introduced by Mr. Robbins—read once and referred to the committee on the judiciary.

AN ACT

To abolish the office of coroner and to provide for the performance of the duties now performed by coroners.

The people of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The office of coroner in the several counties of this state shall be, and is hereby abolished when the terms of office of the coroners in office at the time this act shall take effect shall expire.

§ 2. Coroners' juries, post mortem examiners and coroners' physicians shall be, and they are hereby, abolished when this act takes effect.

§ 3. On or after the first Tuesday of November, 1896, the appellate division of the supreme court for the first judicial department shall appoint four medical examiners and four assistant medical examiners, and assign them or any of them to duty in one or more districts in said department, and from time to time may reassign them or any of them from one district to another, temporarily or permanently, as it may deem best for the public service. Said appellate division of said department may also, in its discretion, before or after said day, appoint two other medical examiners for said department, one of whom shall be an expert pathologist, and the other shall be an expert chemist. The appellate division of the supreme court for the second judicial department shall, on or after said day, appoint two medical examiners for said judicial department, and not exceeding twelve assistant medical examiners. The appellate division for the third judicial department shall, on or before said day, appoint one medical examiner for each judicial district in said department, and not exceeding twenty-nine assistant medical examiners. The appellate division of the supreme court for the fourth judicial department shall, on or after said day, appoint one medical examiner for each judicial district in said department, and not exceeding twenty-five assistant medical examiners. The appellate division in each department, except the first, may also, in its discretion, on or after said day appoint two additional medical examiners for each of the said departments, one of whom shall be an expert pathologist, and the other shall be an expert chemist. In making the appointments of assistant examiners,

as herein provided for, the appellate division of each department shall designate the county in which each of such assistant examiners shall have his principal office and discharge the duties of his office, and may, from time to time, assign them to duty from one county to another, temporarily or permanently as it may be deemed best for the public service. The salaries or compensation fixed by the appellate division for each of said assistant examiners shall be a county charge upon the county in and for which he is designated to perform his duties, and in which he shall have his principal office, and shall be paid by the county treasurer of said county in equal monthly installments. The medical examiners and assistant medical examiners appointed under this act, and their successors, shall be duly licensed and registered physicians, and their appointment shall be made according to merit and fitness, to be ascertained, so far as practicable, by such examinations as the respective appellate divisions for each department shall prescribe. They shall be appointed and shall hold office for the term of six years, and until their successors are appointed and qualified, as prescribed by this act. In case of the death, resignation or removal of any medical examiner or assistant medical examiner, the appellate division which appointed him may appoint his successor for the full term of six years. Any medical examiner or assistant medical examiner may be removed at any time for cause shown, by the appellate division of the judicial department which appointed him. He shall be furnished with a copy of the charges made against him, and shall have an opportunity to be heard in his defense. Each medical examiner, and each assistant medical examiner, shall, before entering upon his duties, take and file in the office of the clerk of the appellate division of the supreme court of his department, his oath of office, and shall execute and file in said office, a bond with two sureties, to be approved by said appellate division of the supreme court appointing him, or any judge thereof, in the penal sum of $5,000, conditioned upon the faithful performance of his duties. If any medical examiner or assistant medical examiner shall neglect to qualify or to give a bond as herein provided, for the period of thirty days after notice of his appointment, the appellate division appointing him may revoke his appointment and appoint another medical examiner in his place and stead.

§ 4. The respective appellate divisions of the supreme court for each department shall fix the compensation or annual salary, payable in monthly installments, to be paid to the respective medical examiners and assistant medical examiners appointed by said appellate divisions in the manner hereinafter stated, and may, from time to time, refix and change the same as to future but not to past services. Said appellate division in each department may also make provisions for stenographic and other clerical assistance, and for office accommodations, and supplies for the respective medical examiners and assistant medical examiners within such department, and for the actual expenses of the medical and assistant medical

examiners. Said appellate division for each department may also direct what county or counties within such department shall pay all or a proportionate share of the expenses of such stenographic and clerical assistance and office accommodations and supplies, and the same shall be paid as county charges by such county or counties.

§ 5. It shall be the duty of the appellate division of the supreme court of the state to make rules and regulations prescribing the powers and duties of medical examiners and assistant medical examiners appointed by it pursuant to the provisions of this act, and to change, alter and amend the same from time to time as necessity may require. The appellate division of each department may make such additional rules in relation to the examiners and assistant examiners in such department, as it may deem proper.

§ 6. It shall be the duty of every peace officer and of every physician, and of all other persons, to report immediately to the medical examiner or the assistant medical examiner of the district wherein the same occurs, every case of sudden or accidental death, or death by violence, or a body found dead, and the facts and circumstances attending the same. The failure of any physician or of any peace officer, or the willful neglect of any other person, to immediately make such report, is hereby declared to be a misdemeanor and punishable accordingly.

§ 7. It shall be the duty of the examiners and assistant medical examiners to examine into the cause of death of all persons who die by suicide, or suddenly, or by accident, or by violence, or may be found dead within the respective districts or counties to which said medical examiners or assistant medical examiners are assigned to duty, and each medical examiner and assistant medical examiner in each judicial department shall have such powers and shall perform such duties as shall from time to time be prescribed by rules and regulations or orders of the appellate division appointing him. Said medical examiners and assistant medical examiners are hereby authorised and empowered to administer oaths, and to take the ante-mortem statements or depositions of persons about to die from other than natural causes, and also to take the depositions of any person or persons concerning the cause of any death, and transmit the same to the district attorney of the county where any such death occurs. Whenever, during or after an examination by him, as herein provided, it shall appear probable to any medical examiner or assistant medical examiner that any person is criminally responsible for causing the death of another, such examiner or assistant examiner shall forthwith apply to a committing magistrate for a warrant for the arrest of such person or persons, and it shall be the duty of such magistrate so applied to, upon the filing with him of a written certificate of such medical examiner or assistant examiner, that upon an examination made by him there is probable cause to believe, and he does believe, that the person or persons named by him are criminally responsible for the death of any person or persons named, or designated as unknown, in such

certificate, it shall be the duty of such magistrate, without further proof to issue a warrant for the apprehension and arrest of the person or persons so charged, and to proceed with the examination of the charge so made in the same manner as in other criminal cases. It shall also be the duty of such medical examiner or assistant medical examiner to report the facts in such cases to the district attorney of the county where such crime has been committed, who shall also have power to issue a bench warrant for the apprehension and detention of the person or persons so charged with causing such death, and proceed to investigate the same before any magistrate within the county as aforesaid.

§ 8. Whenever a person has been arrested upon a charge of criminal liability for causing the death of another person and an autopsy or post mortem examination shall be had upon the body of the person whose death has been so caused, said person under arrest shall have the right to be present in person or by counsel or with not more than two licensed physicians, when such autopsy or post mortem examination is made after his arrest; but neither such person nor his counsel nor any physicians so present representing him, shall have the right to take part in such autopsy or post mortem examination, except to view the same.

§ 9. In any criminal action or proceeding or upon any proceeding arising upon a writ of habeas corpus or in relation to lunatics or habitual drunkards, the judge presiding on the hearing thereof may, by a written order, require one or more of the medical examiners or assistant medical examiners of the state to examine any person, body or thing in any way connected with the issues and matters involved in such action or proceeding, and to testify upon any hearing or trial thereof concerning the same. In any such proceedings not of a criminal nature, the court or judge requiring his attendance shall certify the amount of his compensation for such services, and of his necessary expenses therein, and the amount so certified shall be a county charge, and shall be audited and allowed by the board of supervisors of the county wherein such services are rendered and be paid by the county treasurer. It shall be the duty of a medical examiner to attend upon any trial or investigation in any court in the judicial department in which he may be appointed, upon the requisition of the district attorney of any county in such department, or upon the direction of a justice of the supreme court of such department, and when such attendance is required in a county other than that in which he was assigned to duty and in which his principal office is located, his necessary expenses and disbursements in going and returning from such court and while there, when certified to by said district attorney or by a justice of the supreme court, shall be a county charge upon the county where such court is held, and shall be audited and allowed by the board of supervisors thereof, and shall be paid by the county treasurer.

§ 10. On and after the first Tuesday of November, 1896, the duties and powers of coroners in civil actions and proceedings shall,

in all the counties of this state, except the county of New York, appertain to and be vested in the county treasurers of such counties, and in the county of New York, in the city chamberlain of the city of New York, and said respective county treasurers and city chamberlain shall, for the performance of said duties and powers of coroners in said actions and proceedings, be entitled to receive the same fees and percentages as are allowed by law for the performance of such duties by a coroner of said respective counties. Said county treasurers or said city chamberlain may deputise any person to perform said duties and exercise said powers in civil actions and proceedings, but shall be responsible for the faithful performance of said duties and the exercise of said powers by the person so deputised.

§ 11. When services are rendered in bringing to land the dead body of a person found in any of the harbors, rivers or waters of this state, the district attorney of the county in which said body is found may allow such reasonable compensation therefor as a medical examiner or assistant medical examiner who examines such body shall certify is fair and reasonable, and in accord with the services rendered; the said charges shall be paid by the county treasurer of such county upon the said certificate of said examiner or assistant examiner approved by the district attorney. This provision shall not be deemed to entitle any person to compensation for services rendered in searching for such dead body.

§ 12. The salaries of the medical examiners shall be paid by the state treasurer upon the warrant of the comptroller out of any funds not otherwise appropriated. The salaries of the assistant examiners shall be paid by the county treasurers of the counties to which they shall respectively be assigned to duty, and the necessary expenses of the assistant examiners other than those hereinbefore provided for shall be audited and allowed upon the certificate of a justice of the supreme court, that the same are just and reasonable, by the board of supervisors of the county in which they are assigned to duty.

§ 13. Nothing herein contained shall be deemed to restrict or otherwise affect the power and authority of the district attorneys of the respective counties to employ and fix the compensation of experts in criminal cases, as now provided by law.

§ 14. All provisions relating to coroners shall be deemed repealed as to each county of this state, when and as soon as the terms of office of the coroners of such county shall expire; and whenever the term of office of any coroner shall expire, or he shall die, or resign or be removed from office, no successor shall be elected or appointed in his place or stead.

§ 15. This act shall take effect on the first Tuesday of November, 1896.

This bill was reported unfavorably by the assembly committee on judiciary.

I wish to say that, in my judgment, two things defeated this bill in the committee on judiciary. One was the fact that we placed the power of appointment of the medical examiners, which we provided to take the place of coroners, in the appellate divisions of the supreme court and would not allow them to be appointed by some politician. Overtures were made to us that the powers that be, on one side or the other, would abandon their objections to this bill if we would simply take the appointing power away from the appellate divisions of the court and give it to the politicians. We said : "The life of this bill depends upon taking it out of politics. We will do nothing of the kind. The bill must stand or fall on that provision." And it fell.

The other objection to it,—gentlemen, I am ashamed to say it,—came from the corporation lawyers, who came to me personally and said that they could not favor this bill because as the law now stood—think of it !—they could go to coroners and squelch investigations of accident cases, where men had been killed by the negligence of corporations, and save their clients from damages, but that if this bill went through they were afraid that there would be too many negligence cases investigated, and there would be less opportunity for them to stop investigations to bring out the facts and to perhaps render their clients liable. For that reason at least two gentlemen connected with the state legislature said to me : "I can't favor that bill and I shall do all I can to defeat it."

So you see some of the obstacles that we are liable to meet with when we try to bring up any measure of reform that touches that side of the case, and it is difficult to conceive of any legislation that will not to some extent touch it in many instances. If you limit the bill simply to criminal charges of manslaughter and the like, it may be that negligence has been the cause of death and is so great that a charge of manslaughter should be formulated upon it. This bill, in substance, provides that there shall be appointed by the appellate division in each judicial department of the state a certain number of medical examiners, and for their examining all the cases that coroners now examine, and having substantially the same powers that coroners now have ; and it provides that the accused, where he is under arrest in case of alleged homicide or injury at his hands for which he is charged as liable criminally, may be present at the post mortem or other examination of a person injured ; and there are various other provisions of a general nature, which, no doubt, if you care to look at it at all, you will

examine when you come to see the bill in print. The general effect of it is to abolish coroners' juries and the office of coroner and put in place of them a system of medical examiners, taken from your profession, appointed, not by politicians, but by the courts, as officers of the courts. It does not pretend to limit the right to call experts, but it does provide that in certain cases the court may, of its own motion, summon these trained and skilful men to give their testimony as experts and give the result of their examinations. That is the best remedy that our skill and experience suggest. By "our" I mean the gentlemen whom I have named here : the committee on legislation of your state medical society and of the homeopathic state society and such men as Dr. Macdonald and Dr. Balch, of Albany, Prof. Witthaus, of New York, Dr. Suiter, of Herkimer, many distinguished medical men in New York city, and Judge Herrick and myself.

Another suggestion has been made, not so far-reaching as this, which I approve of very heartily—that is, that in the large cities of the state, at least, it should be possible for the court to appoint a medical commission or board, consisting, we will say, of one expert toxicologist, one expert pathologist and one expert on insanity, and to refer all questions, when an accident happens or an injury occurs or a homicide takes place, by order of the district attorney or of the magistrate before whom the cases come, for examination to this board, giving them the power to get material into their possession for the purpose of examination, to summon witnesses and examine them and then to familiarise themselves with the situation and to render their opinion in writing, very much as Dr. Witthaus suggests in his letter, and to provide that when that opinion is rendered it may be read in evidence by any party at the trial and that either party may call them for cross-examination in regard to it. That would, I think, be a long step in the right direction. It might not be so cumbersome or so difficult to get through the legislature as a change in the coroners' system ; and yet, after all, gentlemen, when you get right down to the finality of this question, in criminal cases at least, you are always liable to have an ignorant coroner, as in a recent case not over a hundred miles from this bailiwick,—and I do not refer to any coroners in the city of Buffalo either,—who may not know how to conduct a post mortem examination, and who may allow men to conduct it who were not competent. You are all the while encountering a very dangerous situation, hence it looks to me as if the radical remedy

was the best remedy of all, and that is to change our coroners' system, to turn them into medical examiners, and perhaps have a central board of paid experts of high skill and experience, in all cases appointed by the court—not elected, not appointed by any politicians, but by the court,—and make them the officers of the court, whose report in writing may be open to either side on the trial of all cases, certainly of criminal cases, and perhaps of civil cases, on the order of the court, substantially as provided in our coroners' bill.

SOME DIARRHEAL DISEASES OF CHILDREN.[1]

By F. H. STANBRO, M. D., Springville, N. Y.

IT IS not my purpose today to read an exhaustive paper on diarrheal diseases of infancy and childhood, but only to touch lightly on certain points of treatment of a few of the more common troubles that we see in this section of the country. So much has been written, so many experiments have been made and so much pathological work has been accomplished, that theories and divisions have no interest for us today, except as they appeal to us as clinicians. 'Tis said by a writer on children's diseases, Holt, I think, that 95 per cent. of diarrheal diseases in children occurs in bottle-fed children. This may seem an exaggerated statement, but it is true in the main in the country and may be wholly true in the city.

Mother's milk is the ideal baby food and I formerly insisted on every mother nursing her baby, but after two lamentable failures, one of which resulted in death of the child, I now examine the milk of a mother whose baby is not thriving and if it shows a condition that cannot be remedied, I wean the infant.

I have had no success with the artificial so-called "foods" of the market, but have used successfully cow's milk, when properly diluted and modified. It is best diluted with barley water, oatmeal water or lime water, to the proper density, and sweetened with cane sugar, not neglecting to add salt. Infants need salt and sugar in food just as they need water to allay thirst. Because their diet is liquid we must not judge they do not need water. We all have seen irritable, feverish, crying babies drink ravenously of cold water and drop off into a quiet, peaceful sleep. Jacobi says there is no virtue in lime water, but it has always worked well

1. Read before the Medical Society of the County of Erie, January 11, 1898.

in my practice; it may be on account of the dilution and not from the virtue of the alkali.

From my observation, a thing much neglected in treating diarrheas of children is the daily examination of the diapers of the sick babies. The mother's description may be very vague; she may give a wrong impression entirely; fat may seem to her to be curds and vice versa and the color sense is poorly cultivated among the laity; she cannot be expected to distinguish between bile and blood changed by the intestinal juices. And especially in these cases of artificially-fed babies, I deem it of great importance to watch the stools, the appearance of which will give so many hints for changes in care and treatment. Curds in the stools demand greater dilution, lumps of fat decrease of cream, and so forth.

There are two or three kinds of diarrheal diseases that we see constantly during the summer months, which differ in cause, course and symptoms, as well as treatment and prognosis. The one that causes as much sickness and as many puny rachitic babies, if not as many deaths, as any other, is the acute dyspeptic diarrhea, as described by Osler and others. As the name implies, this class of trouble is caused by either fermented or improper food or a lowering of the digestive power of the infant through previous illness, atmospheric heat or general weakness, causing imperfect or delayed digestion. The undigested food acts as an irritant and nature's efforts toward health causes the diarrhea. The child seems in usual health, except restlessness, slight attacks of colic and crying, an increase in number of stools, which are normal in appearance, except presence of undigested curds— if the diet is milk—or other undigested food. Also, the stools are extremely acid and excoriate the surrounding parts and have a sour odor.

If properly treated in this stage, by a dose of castor oil, syrup of rhubarb, calomel or the milder gray powder, the intestines will be cleansed of the irritating material and with a change to proper diet all is well. In fact, it is a mild affair and often passes by without the calling of a physician, unless the improper feeding is continued, when the symptoms grow worse, vomiting occurs, the temperature rises, the stools become more profuse and contain more fluid and tenesmus appears with mucus and blood, showing a general involvement of the intestinal tract.

At the beginning of vomiting the physician is always called, as that is the nervous mother's sign of cholera infantum. There are

three indications for treatment: first, empty the intestines, disinfect the intestines, then correct the diet. If vomiting is constant get the stomach quieted before giving any laxative, although 1-10 grain tablet triturates of calomel sometimes seem to act as a sedative and laxative too. The multitude of drugs advised to restrain vomiting proves the unreliability of them all and in my practice I have given them all up and only order a withholding of all nourishment, even water except in very small quantities, for six, twelve and even twenty-four hours. When the vomiting ceases, I begin to give albumin water by the spoon, gradually working back to a normal diet. For the disinfection of the intestines, calomel, 1-10 grain doses, four to six times a day and continued for a few days, works favorably. Salol has proven of much value and Jacobi recommends naphthalin and resorcin very highly. Astringents, such as tannic or gallic acids, combined with large doses of bismuth subnitrate have been of value in my cases, but the remedy which has been of the greatest aid to me is arsenite of copper. There is no drug which appears to help so many physicians and again fails to have any effect in the hands of others as this drug, but, in my hands, dissolving 1-100 grain tablet in water, four ounces, giving 1 drachm doses every fifteeen minutes, until an hour or two has passed, then continuing the dose every hour, gives good results. The stools improve in character, their number is lessened and griping ceases within twelve hours.

In the same children, which have several attacks of dyspeptic diarrhea during a season, appears the more dangerous and startling cholera infantum. This disease sets in in the hottest weather. Seibert claims that atmospheric heat bears a direct influence on diarrheal diseases, and humidity and barometric pressure no influence. Diarrheal troubles begin to increase in the latter part of May, reach the maximum in August and September and decrease as cooler weather comes on. We have all noticed how a hot spell increases the number of cases of this kind and, again, how a sudden cool wave will benefit the little sufferers.

Without doubt cholera infantum is of germ origin, although no constant organism has yet been found. No warning is given in this disease; the onset is sudden, the collapse extreme; vomiting constant and exhaustive; stools profuse, watery, serous and numberless, at first very offensive, but later become odorless and fade into the napkin, leaving only a slight stain, as though the child had

urinated; temperature rises very high, pulse feeble and rapid; from being restless at first the child passes into stupor.

This is the class of cases that needs sustaining and stimulating treatment, which the constant vomiting hinders, if it does not prevent. Washing out the stomach sometimes relieves the vomiting and if large quantities of water are given in vomiting the stomach will wash itself. High injections of cold water will relieve high temperature, but children do not bear cold well and hot water will be absorbed and act as a stimulant, especially if rendered alkaline by the addition of some salt. Astringents or opium may be given by rectum, but it is better to give morphine hypodermatically; a child one year old may be given 1-80 to 1-40 grain every hour or two for a few doses with safety and benefit. Brandy or champagne given cold may help settle the stomach and control collapse, and if diluted may be used hypodermatically or per rectum.

The advice of the best authors is to sustain the patient by combatting collapse with external heat and hot baths, giving strychnine nitrate hypodermically, with the addition of morphine for its effect on the bowels and sustaining effect on the heart. If the stomach will retain anything, champagne and such diffusible stimulants as camphor, ammonia or musk may be given. If we are fortunate to reach a state of convalescence great care will be needed, as these cases are prone to pass into a state of entero-colitis. Milk should be withheld, and albumin water containing brandy will act nicely until milk, largely diluted, or meat juices, or even scraped raw beef can be borne. General tonics, such as iron, strychnine, hypophosphites, are needed to restore health.

The dyspeptic diarrhea neglected, and cholera infantum with the best of care, will often pass into a chronic form, known as entero-colitis, which is distinguished by pain and tenderness over the colon, some tympanitis all over abdomen, passage of semi-solid stools, mixed with mucus and blood. This state alternates with sudden attacks of acute diarrhea with profuse and watery stools, accompanied by much griping and pain. These cases must be kept absolutely quiet in the cradle, and do better if the cradle is kept out of doors during the daytime. Especial attention must be given to the diet, which should be so regulated that the least possible residue passes over the inflamed intestines. Opium is about the only drug that acts well when given by the mouth. Opium should never be given in cases where the stools are offensive, however much it may seem to be indicated, and on the contrary it will act

well in those cases of diarrhea with natural smelling passages. High colonic injections of salt water do good in some cases, cupric arsenite, well diluted, acts favorably at times, as do gallic and tannic acid. If obstinate, nitrate of silver ½ drachm to water one quart acts well, being cautious to follow it by injection of salt water—some give the salt injection first. If there is much tenesmus and some blood, injections into the rectum of starch and laudanum give great relief.

In infants I have never used anything but a soft catheter of linen in giving injections high up, and only introduce it about six inches. By having the syringe bag only slightly elevated and the baby lying on its back the solution will slowly pass up into colon and a large quantity can be received and retained with very little discomfort. Convalescence is slow and the intestines are permanently disabled in some cases.

As I said in the beginning, I have only touched upon a few troubles, and those the ones the most common and familiar, but we oftentimes learn more from criticism and discussion than from the original papers, and thus some good may be accomplished.

HOW THE COST OF PURULENT OPHTHALMIA IN NEW YORK STATE MIGHT BE LESSENED.[1]

By LUCIEN HOWE, M. D., Buffalo, N. Y.

ABSTRACT of an address on the reasons for a law in New York state requiring the use of silver nitrate solutions for the prevention of purulent ophthalmia of infancy in public institutions.

Total number of blind in New York state in 1890 was.....	4,389
10.8 per cent. of these (Magnus) are due to ophthalmia of infancy, or say 10 per cent.; there are from this disease in this state over	438
THE COST.	
If 8 per cent. can work, the number to be supported is over..	403
Of this number 64 are in two schools in New York city and Batavia and their cost is.....	$16,547.38
Cost for remaining 339 if all are paupers, would be.....	42,375.00
Or for the 403 victims of this disease the minimum cost to the state is known to be at least.....	$ 58,922.38
Probable annual cost is over	110,000.00

1. Address of the President at the seventy-seventh annual meeting of the Medical Society of the County of Erie, 1898.

(1) This suffering for the individuals and cost to the state could be very greatly lessened by the use of the Credé method—namely, a 2 per cent. solution of silver nitrate. This fact is absolutely proved by the combined experience of obstetricians.

The evidence is furnished (*a*) by *published* statistics. See tables by Kostling, of Halle, giving the results published by obstetricians in various countries up to 1896. This shows that in

17,767	births	with	no treatment.	9.2	per cent	of ophthalmia of infancy.
24,724	"	"	2 per cent. solution of silver nitrate...	0.65	per cent.	
1,223	"	"	1 per cent. solution of silver nitrate...	2.4	"	"
1,623	"	"	carbolic acid solutions.....	7.7	"	"
965	"	"	0.1 per cent. solution of sublimate....	0.6	"	"
1,396	"	"	other sublimate solutions	0.4	"	"
6,155	"	"	sterilised water.....	2.8	"	"
701	"	"	iodide trichloride solutions.....	1.2	"	"

Evidence for the Credé method furnished also (*b*) by the *unpublished* experience of leading obstetricians in this state, who have said that Credé's method should be made obligatory in public institutions. Among those in the city of New York, for example, are Drs. Boldt, Brettauer, Byrne, T. W. Cleaveland, Clement Cleaveland, Coe, Currier, Gibb, Emmett, Goffe, Jarman, Jacobi, Marx, McLean, Morrill, Munde, A. M. Thomas, T. C. Thomas, Tucker, Tuttle, Vineberg, Von Ramdohr, Wiener and other obstetricians equally prominent, in other portions of the state.

(2) Silver nitrate solution is practically free from danger. Among the fifty odd thousand cases, referred to above, and among the many more thousand in which the method has been used, only four cases have occurred which give even the suspicion of danger. In these the evidence is questionable, or the results simply inconvenient, but not serious.

(3) Two per cent. silver nitrate solution is not necessarily painful, if preceded by cocaine, properly applied.

(4) In spite of all this evidence in its favor silver nitrate solution is not used as it should be, especially in county almshouses.

This last is shown by replies to letters on this point (*a*) from fifty-eight hospitals in this state, and (*b*) from forty-six almshouses in this state. These letters show that this preventive treatment is used less in the rural districts than it is in or near the large centers of population in this state. The census of 1890 also shows that blindness is more common in those rural districts than

in or near the large centers of population. These two facts are apparently related to each other.

The foregoing facts show that the number of blind from this disease is large, that its cost is great, that the combined experience of obstetricians, as published by observers in different parts of the world, point to one remedy as much better than any other thus far known, a remedy that is safe, easy of application and, if generally used, would greatly reduce the number of blind and the consequent cost to the state. Such statistics alone indicate the desirability of having that treatment made compulsory. In addition, however, there are other reasons, not statistical, in favor of such a law. They are:

(*a*) That when the state assumes the care of a child by supporting it, the child becomes practically its ward. In that case the state, as the guardian, has the right to dictate what treatment shall be employed for the child and if one method of treatment has been proved by vast experience to be superior to every form of treatment thus far known, then the state has the right to demand that any physician treating such a child shall use that form of treatment which insures the greatest amount of safety.

(*b*) In the same manner it is not only the right, but it is also the duty of the state to demand such treatment for pauper children, this being not simply for the sake of the child, but also to relieve the state from heavy and, to a great extent, unnecessary taxation.

(*c*) The state has already established this principle of compelling physicians to follow certain procedures, not only by obliging them to report contagious diseases and imposing other duties upon them, but especially has it done so by the enforcement of vaccination. In this it has furnished a precedent for compelling physicians to use a certain method of treatment to prevent a certain disease.

The result of such a law would be:

1. First, that it would immediately tend to lessen the number of children thus affected.

2. The indirect effect would be good in sustaining practitioners who do use this method in spite of objectors.

3. The indirect effect would also be good in condemning obstetricians who neglect its use and, by such omission, run greater risks of adding to the number of blind children, nearly every one of whom, whether paupers or not, must be educated at the expense of the state.

183 Delaware Avenue.

Clinical Lecture.

GENITO-URINARY DISEASES.—GONARTHRITIS.[1]

By B. H. DAGGETT, M. D.

Reported by Ross G. Loop, M. D.

THE young man before us today is nineteen years of age, a painter by occupation. There is no family or personal history of rheumatism. About a year ago he acquired gonorrhea. About four weeks after the first appearance of his urethral disease he developed an arthritis affecting the right ankle, and other joints were progressively involved in a lesser degree. He was incapacitated for doing manual labor for five months. Finally the urethral discharge ceased and all the joint symptoms subsided, except induration, thickening and impaired motion of the right ankle.

About the first of December, 1897, a urethral discharge again appeared, whether it was due to a new infection or recrudescence of the old malady I am unable to say. About a week after this development the metatarsophalangeal joints of the second toe of both feet became swollen and tender, followed by renewal of the arthritis in the right ankle and later by involvement of the metacarpophalangeal joints of the middle and index fingers of the left hand. He is pale and anemic. He is undoubtedly suffering from gonorrheal arthritis.

I will give him oil of wintergreen, salol, iron and some bitter vegetable tonic. I also order flushing of the urinary tract with permanganate of potash, 1 part to 8,000—to be followed after two or three days with a solution of ichthyol—tablespoonful to the quart, to be used twice daily. This will probably reduce the urethral irritation to such a degree that weak solutions of some silver salt can be instilled into the deep urethra without any danger of exciting complications. Europhen is also valuable for this purpose. Argonin (full strength) insufflated into the deep urethra, by means of a powder blower, through a tube curved and fenestrated at its distal end is valuable. Mercurial ointment and ichthyol are to be applied to the inflamed joints, which are to be wrapped in flannel rollers. The roller about the ankle joint should be tightly applied in order to promote absorption by mechanical pressure.

1. Delivered at the Erie county hospital, Buffalo, N. Y., December, 1897.

It is stated that gonarthritis is not a common complication of gonorrhea. The records of this hospital indicate that it is more common than is generally supposed. Grissole reports joint involvement in 2.8 per cent. of his cases. Besnier and others allege that it occurs in about 2 per cent. of their cases.

It rarely appears before the fourth week of the urethral inflammation, but it may occur at any time during the existence of specific urethritis at any stage of its existence. Some authorities regard gonarthritis as a complication of posterior urethritis, and state that at this stage of the malady this condition is frequently unrecognised and its causal rôle as an incitor of rheumatism is overlooked.

Gonarthritis may develop from any nidus of infection upon any mucous surface. Many theories have been proposed to explain the etiology of gonarthritis. The discovery of the gonococcus paved the way for the study of its pathology, but its relationship to gonorrhea was recognised long before Neisser (1873) discovered and demonstrated that a specific germ produced gonorrhea.

Rosalimus and Lewin believed that the action of the specific toxin of the gonococcus on the vaso-motors caused the arthritis. Senator alleged that the local irritation affected the trophic nerves. Guyon and Janet affirmed that the ptomaines of the gonococcus caused the metastases. Shuster believed that the combination of gonorrhea and syphilis was accountable for the joint involvement. Diday thought that a rheumatic diathesis must exist before the joint complications occurred, while Theiry denied that any relation existed between the rheumatic diathesis and the joint inflammation occurring in a gonorrheal subject. Peter, Gouillard and others said that it was articular rheumatism, plain and simple. Duboc said it was gout. Loeb said it was due to the gonorrheal process in the posterior urethra. Fernier believed that gonarthritis was due to urethral injury and called it urethral rheumatism. Panas stated that injury to the urethra by catheterisation caused erosion, and infection might induce gonorrheal arthritis. Ricord and Bergh agree with Loeb and consider gonarthritis a complication of posterior urethritis. Bond believed that inflammation of the prostatic veins caused gonarthritis and that inflammation of the lymphatics was never followed by joint complications.

Guerin, Loraine and Lesigne said that gonorrhea was a general disease, with local manifestations, because it caused remote complications. The gonococcus has been found in the joint effusions

and in the blood, and hence it is claimed to be the cause of gonarthritis. E. J. Senn alleged that the gonococcus is a pyogenic organism on mucous surfaces, but when latent germs migrate by the blood or lymph and settle upon serous surfaces a plastic inflammation results.

Bumstead said that gonorrheal rheumatism is essentially a hydrarthrosis and that if empyema of the affected joints occurs it is the result of a mixed infection.

The clinical history of gonarthritis is variable: it may be a mild, dropsical condition, readily healed, or a catarrhal condition, resulting in anchylosis, or a severe form, inducing erosion, phlegmon and tenosynovitis or bursitis.

The clinical history, together with the macroscopical and microscopical examination, will give data for diagnosis. Konig said that the urethral secretion should be examined in all cases of catarrhal inflammation of the joints. Fenger said gonarthritis usually attacks several joints. Senn said that it is a monoarticular disease.

This disease spends its force or settles upon one joint. One attack apparently predisposes to another. Recrudescence or a fresh attack of gonorrhea will cause this complication to reappear.

General treatment is antiblennorrhagic and antirheumatic. In the first stages, the local treatment is antiphlogistic, in the latter stages resolvent and absorbent. The treatment is based on its cause, gonorrhea, whether active or chronic. Remove this cause and its complication, gonarthritis, disappears. Never attempt to break up adhesions resulting from gonarthritis until the gonococci have disappeared from the secretions of the urethra as well as from the urine.

The surgery of the graver forms of gonarthritis will be considered at another time.

DYSMENORRHEA.

Dr. H. Talley states (*Phil. Polyclinic*) that a mixture of caffein, potassium bromide and tincture gelsemium is of much value in the treatment of dysmenorrhea. This should be administered for a few days before menstruation.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Special Meeting, held February 13, 1898.

REPORTED BY F. C. GRAM, M. D., Secretary

THE Medical Society of the County of Erie met in special session Sunday, February 13, 1898, in the rooms of the Buffalo Academy of Medicine.

The president, Dr. LUCIEN HOWE, called it to order at 4.15 P. M. In announcing the death of Dr. John Cronyn, which had occurred February 11, 1898, he said that it was especially proper in this instance to do honor to the memory of a man who was deservedly prominent among his fellows. His natural ambition and his studious determination to excel brought proper honors. The institution of the Niagara University, the child of his brain, will stand as a monument to him or as a lengthened shadow of the man; another one will be the monument engraved upon the minds of his patients. "Death laid his hand gently upon his harp to deaden its vibrations."

On motion the president appointed as a committee on memorial Drs. Herman Mynter, Thomas Lothrop and H. R. Hopkins.

Dr. A. A. HUBBELL, in expressing his personal tribute, said that for the past fifteen years he had been intimately associated with the deceased, which had resulted to his interest and pleasure. Dr. Cronyn began his practice long before the days of anesthesia. His early contemporaries were such men as Flint, Hamilton, White and others, among whom he easily held his own. He constantly strove to excel. He kept in close touch with all progress. Always attentive at the meetings of our local societies, he was also related to state and national organisations. He was the central figure of the medical department of Niagara University, which he instituted not from selfish motives, but because he felt it was time to place medical education on a higher standard. His many good qualities stand out for us to emulate.

Dr. MYNTER, of the committee, then presented the following memorial:

IN MEMORIAM JOHN CRONYN, M. D.—1826-1898.

The Medical Society of the County of Erie has heard with profound sorrow of the death of one of its oldest and most valued members, Dr.

John Cronyn, and it desires to place on its records its appreciation of his high professional attainments, his great services for higher medical education, his pure, modest, unassuming and christian life—a life that well may be taken as an example by the rest of the profession.

Dr. Cronyn was born in Ireland in 1826, but received his education at Toronto, where he was graduated in medicine. He practised in Fort Erie for nine years and removed to Buffalo in 1859, where he has since lived and labored. He quickly made a name for himself by his indefatigable work, his tireless industry, and close study of scientific medicine—a name he maintained by the same means—till he died in the harness.

He has held a number of appointments with credit to himself and honor to the bodies which greeted him. For eight years he acted as marine surgeon to Buffalo. For thirty-five years he has been first surgeon and then chief physician to the Sisters of Charity hospital and has seen it grow, largely under his fostering care and by his wise counsel, to the great and magnificent institution it now is. He has been president of the New York State Medical Association, of the Medical Society of the County of Erie and of the Surgical Association, the predecessor of the Buffalo Academy of Medicine, of the medical department of Niagara University, and occupied, from its foundation, the chair of principles and practice of medicine and was president of the faculty. He was an honorary member of Ontario Medical Association and received the degrees of Ph. D. and LL.D. from Niagara University for distinguished services in the cause of higher medical education; a member and at one time president, of the board of managers of the Buffalo state hospital.

These are a few of the well-deserved honors that came to him and which he valued simply as an expression of public confidence. As a man he was a shining example of a courteous gentleman of the old school, but too rarely found in our busy days. He was a faithful friend and a wise counselor to the many young physicians educated under his eyes and under his guiding mind.

Quick to resent an injustice or insult, he was still quicker to forgive and forget. His mind was stored with facts and information from his incessant reading in all the branches of scientific medicine, he was a regular attendant at state, county and city medical societies, always ready in his courteous and gentle way to discuss any subject and always spreading new light in debate. As a lecturer, particularly in clinical medicine, he was painstaking, clear and scientific, never allowing private affairs to interfere with his official duties, always at hand at the appointed hour.

Dr. Cronyn believed most thoroughly in the efficacy of drugs and he gave his students his reasons for employing them in a way that was convincing and interesting. Who shall mention his relations to his patients (and among them a great many of the poor), but they them-

selves? His courteous, dignified, gentle appearance in the sick-room was a remedy in itself. He was a magnificent example of the old family physician and friend, maintaining always his patients' love and affection.

He was benevolent, with a kind heart and a generous hand to the sick, the sorrowful and the poor and he did not let his right hand know what his left gave away. As a citizen he was interested in the public welfare, an upright, virtuous, model man; as a friend he was faithful, considerate and loyal.

Surely the world is richer for such a life and well may we point with pride to the fact that he lived and labored among us for almost half a century and hope that we, the younger members of the profession, may emulate him in his virtues, his studiousness and his public spirit.

The society extends its heartfelt sympathy to his bereaved family, with the scriptural quotation: "Well done, good and faithful servant! enter thou into the joy of thy Lord."

HERMAN MYNTER,
THOMAS LOTHROP,
HENRY R. HOPKINS,
Committee.

Dr. Hopkins, in moving its adoption, took occasion to refer to his long association with the deceased. He began his practice in the immediate neighborhood of Dr. Cronyn, since which time their lines had lain along similar courses. In consequence of this the speaker could vouch for every statement contained in the memorial. He had borne himself even better than the memorial testifies. He was one of the old family physicians. He was an expert surgeon in his day, and yet he was known among the present generation only as a general practitioner. There was in his life also a sense of loftiness and he had a profound love for music, art and religion.

Dr. F. W. Abbott said that his acquaintance with the deceased began in 1865, while a resident physician in the Sisters of Charity hospital. He was always impressed with Dr. Cronyn's uniform courtesy and his aptitude to impart instruction. In the departure of so many of our members one thought presented itself strongly to the speaker: "Be ye also ready."

Dr. Conrad Diehl, the mayor, wished that he were better able to express his feelings at the loss of a fellow practitioner whom he had known since 1862, and with whom he had since been more or less associated. He was a true physician—charitable, honest and religious.

Dr. J. B. Coakley said that Dr. Cronyn's life has been fraught with noble usefulness. Respect for the rights and tenderness for the feelings of others stamped his conduct everywhere. He came up fully to Sidney's definition of a gentleman: "High thoughts seated in a heart of courtesy." Dr. Cronyn has been deservedly honored, loved and trusted by the people of this city. The speaker knew of no better legacy that a father could leave his household, or a patriot leave his country, than such a record as Dr. Cronyn left to attest his virtues.

Dr. W. C. Callanan had known the deceased since his own boyhood and spoke of his excellent qualities.

Dr. Ingraham said he had been intimately associated with Dr. Cronyn for fifteen years and the more he knew him the better he loved him. He was one of the most tolerant and least bigoted of physicians.

Dr. Grosvenor mentioned the exceeding studiousness of Dr. Cronyn and his marvelous knowledge of medical literature.

The memorial was then adopted.

The following telegram was received by the president:

Tonawanda, N. Y., February 13, 1898.

Dr. Lucien Howe, President of the Medical Society of the County of Erie, 183 Delaware Avenue:

I cannot express my sorrow at the sad loss of Dr. Cronyn. Our kind, hearty friend and physician is gone. We have no one to take his place. FREDERICK F. HOYER.

On motion the members decided to meet at 9.30 Monday morning, February 14th, in the grand court of Ellicott Square, and attend the funeral in a body.

The meeting then adjourned.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Tenth Annual Meeting held in St. Louis, Mo., November, 1897.

[Abstract.]

Dr. Howard A. Kelly, of Baltimore, read a paper entitled:

SOURCES AND DIAGNOSIS OF PYURIA.

I BEGIN by stating that if I were asked what subject in the entire range of medicine and surgery I considered it most important to bring prominently before the profession at present, I

would probably reply, pyuria. The subject is important on account of the great number of undetermined cases under treatment and on account of the progressive nature of some forms of the disease, as well as on account of the facility with which the diagnosis can now be made with better means of investigation. Pyuria, of course, signifies merely the presence of pus in the urine; this may be in large or in small quantities, and may proceed from any part of the urinary tract from the external urethral orifice up to the cortex of the kidneys.

The investigation of a pyuria is an analytical one, taking the symptom and trying to trace its origin. The best way to investigate a pyuria is to begin by making an examination of the urinary tract, following an anatomical order, proceeding from below upward. The history of the case, the microscopical and bacteriological and chemical examinations of the urine, must be carefully made, and all facts ascertainable by palpation must be elicited first. The direct investigation then proceeds in an orderly manner, beginning with the external urethral orifice, where Skene's glands may be distended with a drop or two of pus; the urethra may be in a state of intense inflammation and even ulceration, affording sufficient pus to yield a decided sediment in the urine. Sometimes a suburethral abscess may pass unnoticed for many months, in spite of the fact that it contains from a teaspoonful to a tablespoonful of pus.

The vesical sources of pyuria are from a cystitis, including a trigonitis, or inflammation of the trigonum; foreign bodies creating a cystitis; ulcers associated with a cystitis or tubercular in their nature. These affections will all be readily recognised by making a cystoscopic examination of the patient in the knee-breast position through a simple cylindrical speculum. By this examination the cystitis will often be found to be well localised and in patches, which may be readily treated by direct topical applications. Upon removing a foreign body, the cause of a cystitis, the pyuria disappears. Ulcers seen through the cystoscope may be treated with strong solutions of nitrate of silver, curetted, or cauterised. There are also a number of extra sources of pyuria, and these arise most frequently from tubal and ovarian abscesses breaking into the bladder across the base of a broad ligament.

If the pyuria does not come from the lower urinary tract it must then come from one of the ureters or kidneys; a telltale blush around a urethral orifice often marks the side from which the pus issues. I have found pyurias from the upper urinary tract pro-

ceeding from strictures of the ureter with a gonorrheal, tubercular, or other infection. The site of the stricture and the source of the pyuria may be readily located in these cases by passing a urethral catheter, a metal one for the low strictures or a flexible one for those above the pelvic brim.

Renal pyurias are, after all, the commonest of all, and I find that these are most frequently caused either by a calculus in the pelvis of the kidney or by a tubercular pyelitis or by a hydronephrosis which has become infected. Such pyurias are often the occasion of the presence of large amounts of pus in the urine, appearing either continuously or intermittently. By passing a renal catheter well up into the pelvis of the kidney the pus may be evacuated and the pelvis washed out. If the pus is too thick to flow through the catheter it may be thinned out by injecting a little fluid.

By making an orderly investigation of this sort the pus is traced to its origin, and the source of the disease discovered and treated and the cause eliminated, if possible, just as we would seek to investigate the source of the contamination of a body of water by taking a boat and traveling up the muddy stream until we had located the point at which it entered the main body, and until we found that above this point the water was free from contamination. The methods proposed are safe in careful, practised hands.

DISCUSSION.

Dr. LEWIS S. MCMURTRY, of Louisville, Ky.: Dr. Kelly very appropriately remarked by way of introduction to his paper that the object of this society is educational. To promote such educational purpose it is essential that we should discuss one another's views freely, fairly and fearlessly, otherwise we will degenerate into a mutual admiration society, quite devoid of educational influence. Any criticism that I may offer on Dr. Kelly's paper will, I hope, be received in this spirit.

In the first place the subject presented by the essayist is not so novel as might at first appear. Diseases of the female bladder and urinary tract have been studied for years by Bozeman, Emmet, Skene, Simon and Pawlik. The published results of these investigations have illuminated the subject so that the diagnosis and treatment of diseases of the female bladder and urinary tract are now upon a scientific basis. Exploration of the bladder by endoscopy and of the ureters by catheterisation has been made practicable by Prof. Pawlik, and the method modified and popularised in this country by Dr. Kelly. As a diagnostic resource the method described by the essayist has certain definite value, but, in my judgment, its scope in practical therapy is almost *nil*. I have wit-

nessed the use of the instruments by Dr. Kelly, and have personally applied the method in a number of cases of vesical and renal diseases, consequently I am discussing the subject from the standpoint of personal experience.

I would not be understood for a moment as saying that this method is useless and I beg that my remarks be not so construed. In the differential diagnosis between unilateral and bilateral disease of the kidney, in eliminating vesical involvement in cases of pyonephrosis and in some other conditions this method of exploration has a useful purpose and should be cultivated. It is altogether for diagnosis. I know no advantage it can offer in the treatment of renal disease.

It is the custom of surgeons to make an investigation of the urine of women as a routine part of examination preparatory to operation. In a very large proportion of the cases presenting for operation, pus will be found in the urine. This observation should not mislead the surgeon, since pyuria may be due to leucorrhea, gonorrhea or purely transient causes, disappearing when the operation has been performed. Unless there be quite a large quantity of pus, and in a specimen carefully drawn with the catheter, it is unnecessary to spend time and energy in search of a remote cause, when the most probable source of pus is apparent.

Moreover, exploration of the ureters is not under such conditions devoid of danger. Just as the area of gonorrheal infection may be extended from the vagina through the cervical canal and beyond by injudicious instrumentation, so may a vesical infection be carried along the ureteral mucous membrane to the pelvis of the kidney. Such indiscriminate and routine exploration of the upper genital tract in cases of pyuria as the essayist suggests is by no means a harmless procedure; it may convey an infection along clean surfaces to the kidney. And again, ureteral catheterisation can avail nothing as a method of treatment. The constant secretion and passage of urine is as efficient for drainage here as any artificial washing can supply.

Dr. Kelly has cited a case of appendicular abscess opening into and discharging through the bladder as an instance illustrative of the value of this method in diagnosis and treatment. Surely such extensive disease would furnish in its clinical history and general physical signs sufficient indications for diagnosis and treatment, without searching through such a devious route. In another case the common clinical observation of suppurative salpingitis discharging into the bladder is mentioned in illustration. Such cases are not uncommon and I am unable to appreciate the necessity or value of vesical exploration, either for diagnosis or as an adjuvant to successful treatment of that form of pelvic abscess. Certainly one would be at a great disadvantage to exchange the established method of examination by touch for vesical exploration in such conditions, and I am again unable to appreciate how

such exploration could materially add to the diagnostic signs of pelvic abscess with pyuria so readily detected by the ordinary methods now in vogue.

In the case of suppurative pyelitis just related by Dr. Henrotin, which was treated by both Dr. Kelly and himself, the ureter was catheterised and the pelvis of the kidney washed sixty-one times, when finally a nephrotomy was done for the cure of the patient. Is it an advantage to subject a patient to such prolonged and painful treatment of very doubtful efficacy when the more direct, more surgical and safe procedure of lumbar incision can be utilised? Certainly no better illustration of the inefficiency of ureteral catheterisation as a therapeutic resource could be given than the case related by Dr. Henrotin as treated by Dr. Kelly and himself.

In conclusion I venture to predict that the mature judgment which is born of experience will demonstrate that the range of usefulness of ureteral catheterisation is very limited. The enthusiasm attaching to a novel and ingenious procedure is prone to exaggerate its scope and value. The history of surgery is teeming with illustrative instances. While valuable in diagnosis, the successful treatment of pyuria involving the higher area must be conducted by other methods than ureteral catheterisation.

Progress in Medical Science.

MEDICAL EDUCATION AND STATE EXAMINATIONS FOR LICENSE.

By WILLIAM WARREN POTTER, M. D.,
President New York State Medical Examining and Licensing Board.

STATE MEDICAL SOCIETIES AND THE EXAMINING BOARDS.

DR. GEORGE BEN JOHNSTON, of Richmond, in his presidential address before the Medical Society of the State of Virginia, September, 1897, said: The creation of legal requirements to enter into the practice of medicine, accomplished by the various state societies acting independently of each other, has made a profound impression on the medical schools all over the country. Without exception they have advanced their requirements for entrance, prolonged their terms of study, and perfected their methods of teaching. They have also entered into hearty coöperation with the licensing boards and have banded themselves into a league whose purpose it is to still further elevate the standard of

education and secure uniform methods of teaching. The natural consequence of these distinct advances and the attraction of public attention to the work in this line of societies and licensing boards brought about the formation of the Confederation of national examining and licensing boards. This organisation is yet young but rapidly pushing forward to accomplish a splendid work, and it deserves the hearty support and coöperation of every state society and licensing board. Its objects are to exalt medical education, to establish a fixed standard of requirements to enter the profession of medicine, to procure uniformity of laws regulating the practice of medicine, and reciprocity between the various state organisations by means of which the license of one board will be recognised and accepted everywhere. These are aims greatly to be desired, and from the present trend of legislation it is not too much to hope that they will be speedily accomplished. There is no need for a national board of licensers. All of this should be regulated by the representatives of the various states assembled in the councils of the national confederation agreeing upon definite methods and prerequisites.

OHIO REGISTRATION AND EXAMINATION LAW.

THE Supreme Court of Ohio, (*Lancet-Clinic*, October 30, 1897,) by a unanimous decision rendered by its members, has declared the law to be constitutional.

This is a valuable victory for the medical profession, and will greatly simplify medical matters for the future.

In the above decision the case and cause of one Franz, of malodorous fame, was lost by the defendant, and he will be obliged to hie himself to the environs of other states for the purpose of conducting his quackery business.

The Ohio state board of registration and examination may now take courage and fearlessly go ahead in a prosecution of those who do not meet the requirements of the law. To the writer it appears to be quite apparent that the public is in sympathy with the physicians in their purification cause. The work is only begun and is very far from being ended. The board has the authority of the law to say what educational schools are in good standing. This will make an end of osteopathy, christian science, and all of that train of wickedness, including the claims of the hygeia medical college people of Cincinnati.

All is well that ends well.

THE MARYLAND MEDICAL EXAMINING BOARD.

THE result of the state board medical examination last May (*Maryland Med. Jour.*, December 25, 1897,) and the unfortunate overthrow of so many candidates at that time caused so much dissatisfaction among the medical schools, that after several conferences between representatives of the various schools of Baltimore and some correspondence between a committee from the schools and the examining board, a meeting was called last week for the purpose of considering amendments to the medical practice act.

So well attended was this meeting that comment is scarcely necessary. Rather than a conference, it was more like a battle between those supporting the schools and those in sympathy with the board. The object of the proposed amendments was, among other things, to put members of teaching bodies on the examining board and compel examinations in the primary branches to be conducted by those who were teachers in the schools.

These amendments were proposed by the schools because it seemed that the board was unnecessarily severe on the graduates of schools, and students who had stood well during the term and had passed a creditable examination were turned down by men who were said to be inexperienced in conducting examinations and who were supposed not to be well versed in the elementary branches. There were some suggestions in the amendments that were undoubtedly good, but the amendment, as a whole, was voted down by a large majority, many men in the schools voting to support the board in its present course.

The objections to putting on the board men connected with schools are obvious and, as one of the board said, of the twenty-eight states that require a board examination, not one contains members from the teaching bodies. The dishonesty of candidates was to be deplored and perhaps a larger number than usual was caught in the act of breaking the pledge at this examination because previous tests had not been so strict.

It was, perhaps, a surprise to the college men that the board carried the day at this meeting, but the unbiased spectator cannot help seeing that the results of this meeting will be of advantage to both parties. The schools will be compelled to turn out a better set of men, more efficiently prepared for the final test, while the board itself will conduct examinations in such a way that the temptation to cheat will not be so great, and, also, even without

compulsion, they will undoubtedly modify some of the rules which have governed them heretofore.

The board was appointed by the state faculty and is in a measure accountable to the faculty and when it makes up its report at the next annual meeting, perhaps it would be well to clearly explain all its actions without the vague phraseology that occurred in its reply to the committee of the colleges. The board is above all things honest and sincere in its work, as its members have no other motive than to do their duty and certainly they have done it well.

It is very unfortunate that the board has no power to drive out illegal practitioners, but the law gives it power to examine and license only, while the privilege of detecting is left to any member to whose notice any irregularities may come. It is probably better for the community and the cause of higher education that the amendments were defeated.

NONGRADUATE APPLICANTS IN ILLINOIS.

THE Illinois state board of health (*Medical Standard*), at the quarterly session held in Chicago on October 5th, adopted the following resolution with respect to the examination of nongraduates applying for certificates to practise medicine:

Resolved, That after May 1, 1898, all nongraduate applicants for license to practise medicine and surgery, who are examined in accordance with the provisions of the medical practice act, in addition to the requirements already exacted, must present as evidence of a satisfactory preliminary education, either:

1. A diploma or certificate of graduation from a high school.

2. A certificate of having passed the matriculation examination to a recognised literary or scientific college.

3. A certificate of successful examination by the faculty of any reputable university or college of arts or science (not members of a medical college faculty), by the state superintendent of public instruction of Illinois or by the principal of a high school in Illinois, in the following branches: English grammar, arithmetic, elementary physics, United States history, geography and Latin equivalent to one year in a high school.

Each candidate will alse be required to present a certificate from a medical college in good standing with this board, attesting that the applicant has—

1. Pursued the study of practical anatomy in said college for at least one term and has made dissections of the entire cadaver.

2. Taken at least one full course in operative surgery and practical obstetrics.

3. Personally attended six or more cases of labor.

Bacteriology has been added to the subjects of the nongraduate examination.

In taking this step the board has acted wisely and entirely within the scope of its authority. The Illinois statute governing the practice of medicine does not require that applicants shall be graduates of a medical college, but it does assume that persons presenting themselves for examination shall be possessed of those qualifications which common law has established as customary for the discharge of such important public duties as constitute the practice of medicine. This standard of qualification, however, is not and never has been a fixed one, or even a minimum one. The standard owes its degree of minimum requirements to the action of the body of the institutions teaching medicine. The medical colleges create the standard, and as facilities for imparting scientific knowledge multiply, the standard is constantly advanced. Recently the Illinois medical colleges have announced requirements regarding a preliminary education as a condition for admission, and the state board of health is justified, in the spirit of the law governing its actions, in advancing its requirements to accord with the prevailing standard established by the colleges.

In adding bacteriology to the subjects of the nongraduate examination, the board properly recognises a department of medical science now imperative in medical knowledge.

The board incidentally reaffirms its position with reference to medical colleges in "good standing" and leaves to those institutions the same authority in regard to preliminary educational requirements of their matriculants as they have exercised heretofore. The law seems fully established and generally understood by boards that in the absence of statutory authority to prescribe minimum entrance requirements for colleges, the extent of the authority of the board is limited to an act of approval and does not contemplate mandatory rules. The decision rendered by the Missouri court adverse to the action of the Missouri board of health in issuing minimum matriculation requirements is clear on this point.

The action taken by the Illinois board will be approved by those who supported the effort to have a new medical practice act passed by the last legislature. The proposed law had two fundamental propositions: first, that no certificate should be issued to practise medicine in the state without examination, and, second,

that a diploma from a medical school approved by the board should be a requisite to entitle to examination. In the new rule formulated the board has advanced toward this standard as far as the text and spirit of the existing law authorises.

CENTER OF MEDICAL EDUCATION.

A GRADUAL change is taking place in the center of medical education. Comparing the statistics of 1888–1889 with those of 1894–1895, we find that the Chicago medical institutions have increased in attendance from 1,338 to 2,294, while the New York medical colleges show a decrease in attendance, which has fallen from 2,081 to 1,893. Baltimore has almost doubled its attendance and now has 1,293 students. St. Louis now takes fourth place, having passed Baltimore, Cincinnati and Louisville, and it now stands fourth, with an attendance of 1,399, while Louisville is sixth, with 947 students, a decrease of 43. Philadelphia, which was over 500 behind New York in the first period, is now over 300 ahead, with an attendance of 2,201, a gain of 686 over the figures of 1888–89.—*Journal A. M. A.*

A very natural question regarding the above is, why have such changes taken place? New York being the largest city in the union, we would expect her to offer better inducements and have a larger medical class than other smaller cities. If one studies a few facts concerning the case, possibly an explanation may be forthcoming. It will be remembered that New York state has taken the lead in the last six or ten years in raising the standard of medical education. She was the first to require as a prerequisite to the study of medicine a literary education to some degree above the high school. A state law was passed later raising the standard higher and requiring all who did not have a college degree to pass a satisfactory examination before a state board. At the same time the medical colleges in the city of New York increased their course from two to three, then to four years, and also enforced harder final examinations. Medical colleges in other cities have followed suit, but all medical colleges in each city did not, many of them remaining more or less lax in their requirements for several years and many of them still so; especially is this true of St. Louis, which shows the largest proportionate gain.

Possibly, indeed probably, these facts account for the changes in the number of students studying in the various cities. Medical students, as a rule, are apt to go the way that offers the least resistance.—*S. W. Med. and Surg. Reporter.*

KANSAS NEEDS A PRACTICE LAW.

WHAT is needed in Kansas (*Kansas City Med. Record*) and in many other states is a stringent law regulating the practice of medicine. It is somewhat singular that other laws seem easy of enactment in Kansas, while a law to protect the people from empirics cannot be passed. We believe this is to some extent the fault of the profession generally. Some hold the view that these matters will regulate themselves, but observation teaches us that they do not. Again, others argue that there is no use to make an effort, as the legislature will not heed the demands. We believe this is an error. Qualified physicians in the state of Kansas are sufficiently powerful to cause the enactment of any just and reasonable law which they may agree upon. The action should not be delayed till after the legislature meets, but should be commenced as soon as the legislature is elected. Every physician in the state should constitute himself a committee of one to look after the legislators of his acquaintance, and instruct them fully in regard to the matter, and there will be no trouble in passing any law that is just and equitable.

CONSTITUTIONALITY OF LAWS REGULATING PRACTICE OF MEDICINE.

UNDER the civil law (*Jour. of Med. and Science*) no barriers were drawn around either professions of law or medicine. Anyone who pleased might practice them without any previous qualification, subject always for injuries inflicted upon others. The common law, having an habitual regard for the widest freedom of action and borrowing from the civil law, always favored the right of any man to practise in any profession or business in which he was competent. It was a right inherent in every man to practise the art of medicine. But in modern times the tendency of legislation is to prescribe qualifications for the practice of the professions of law and medicine. Its competency cannot be successfully impugned. Learning and good moral character may be required as a condition to the exercise of the rights to practise them. A law enjoining reasonable requirements as to learning and character is simply an exercise of the police power. This power may be exercised in barring from admission those who apply for the right to practise the profession of medicine and also in excluding those who have been practising it. Such legislation is justified by the safety of the lives, health and comfort of the people, which is the supreme

law. In no case is the practice of medicine a property right. Nor is it vested right. But it is a valuable right and no one can arbitrarily and without reason be deprived of it. Such is the general statement made by Judge Pugh, of the court of common pleas of Franklin county, Ohio, in the case of State vs. Ottman, where he holds the law of that state passed February, 1896, entitled "An act to regulate the practice of medicine," constitutional. That it authorises the medical board to refuse to grant or revoke a certificate to practise "if any person guilty of felony or gross immorality," he does not consider in violation of the provision of the constitution of the United States which prohibits the passage of any ex-post facto law or bill of attainder, though it was argued that this was a deprivation of a civil right for past conduct. Neither does he think that it violates the provision which ordains that the citizens of each state shall be entitled to all privileges and immunities of citizens of the several states; nor anything in the fourteenth amendment; nor the constitution of the state, especially in its provisions as to appeals.

PHYSICIANS AS POLITICIANS.

THE need of organisation and the value of it, too, (*Maryland Medical Journal*, January 8, 1898,) have become more apparent to the medical profession in recent years. Physicians, as a rule, act in harmony in their scientific deliberations, but when it comes to a question of proposing and enacting laws which are for the benefit of the people as well as for the profession, the latter are as babes in arms. This weakness is especially noticeable at each session of the Maryland legislature.

The most important questions pertaining to the health and welfare of the people are presented to the legislature in the most emphatic manner by a large delegation of really prominent physicians, and notwithstanding facts are clearly stated the whole matter is lost by the political influence of one or two opponents, simply because prominent physicians with no "pull" have no weight with politicians.

An example of this was in the early attempts to pass a medical practice act in Maryland, which at first was easily defeated by influence. And even now, when the medical law licensing the physician and protecting the public of Maryland is in a fairly good shape, it is stated that influence will be used at the coming meeting

of the legislature to make serious changes and actually weaken the effect of the law; and this in spite of the fact that the state faculty, which is, or should be, behind every medical question, voted by a large majority to leave this act unchanged.

It is in just such questions as these that the better class of physicians should recognise the fact that the profession should know something of practical politics and thus meet their enemies with their own weapons. As was stated before, twenty-eight states have medical laws and no single board contains members from one of the medical schools in that state. Why should Maryland be an exception? Is it a confession of weakness on the part of the schools, or is there some other reason for this desired change? The members of the examining board certainly have nothing to gain or lose by passing or rejecting candidates. They are certainly sincere in their work.

On the other hand, they have been criticised, and justly criticised, too, for asking questions of an unpractical nature, some of which probably no physician could answer. Because the examining board is not infallible and makes mistakes, it would be very foolish for the profession of the state to make matters worse by making an additional mistake and thus weakening a good law.

The examining board should report to the faculty at its next annual meeting and should not be too high and mighty to explain its acts and receive advice as to the kind of questions to ask and the manner of conducting the examination. It should be the duty of every physician of Maryland, who desires a high standing of his profession, to give his views on this important question without that quibbling and false reasoning which was so apparent at the recent special meeting of the faculty.

To show the feeling of some of the members, one physician present at that meeting said he was heartily in favor of sustaining the examining board and he was against any proposed change in the law, but as a member of the faculty of one of the schools he felt obliged, and in reality had promised, to vote against his convictions. Such a feeling will hardly tend to elevate medicine.

One danger of bringing this question before the legislature is that ignorant members may make further amendments and entirely destroy the value of the whole act. If this question does come before the legislature it will be a question of influence rather than of merit.

ENFORCING THE OHIO MEDICAL LAW.

THE Hamilton County Prosecutor is busy. Within the last few days (*Lancet-Clinic*, January 22, 1898,) there have been more than twenty indictments found by the grand jury against those who are engaged in practising medicine illegally. One or more are in jail, unable to give a small bond. Those who are indicted have against them a sufficient proof to warrant a belief that they will be convicted.

The good work will go on until the people are relieved of the presence of a class of persons whose very recognition is a menace to the ignorant and a readiness to become copartners in guilt with those who, in the eyes of the law, are engaged in criminal occupations. The Ohio law is an effective instrumentality, and as such has been declared by the State Supreme Court to be constitutional.

THE ALABAMA SYSTEM.

WE publish in another column (*Western Medical Review*, Febru- 15, 1898,) a paper on the Alabama system. It will surprise many of our readers to know that any state in the union had such an excellent law. It seems that in this regard the South is far ahead of the North. Mississippi's law is very similar to that of Alabama, except that the former has but one board of examiners, which is also the board of health. This board consists of twelve members, and is appointed by the governor, five of whom, however, must be appointed upon the recommendation of the state medical society. The law in both of these states is faulty in that neither has the power to revoke certificates.

The idea of having county examining boards, at first thought, would seem to be bad, but the proof of the pudding is in the eating, and it proves, after nearly twenty years' trial, to be all right. It certainly has done one good work for each county ; it has brought about the organisation of a live, active, working county medical society in every county in the state. Dr. Sanders, in the discussion following the reading of the paper, said : "The organisation of a county medical society in every county in my state I regard as an achievement of very great value and as far outweighing any temporary evil that may have resulted from granting licenses to a few incompetent men." We would urge the reading of Dr. Sanders's paper and would call attention to the way our Alabama friends get rid of the sectarian bugaboo.

[Dr. Sanders's paper in full will be found in the Transactions of the National Confederation of State Medical Examining and Licensing Boards for 1897, also published in the Bulletin Am. Acad. Med., December, 1897.—*Compiler.*]

COMPULSORY REGISTRATION REFUSED.

JUDGE HOLMES, in the Massachusetts supreme court, (*Boston Med. and Surg. Jour.*, Jan 20, 1898,) recently dismissed the petition brought by Michael Nolan, of Haverhill, asking for a writ of mandamus to compel the board of registration in medicine to give him a certificate of registration. Nolan applied to the Board on December 10, 1894, setting forth in his application that he was a graduate of Vermont Medical College, at Rutland, in 1889, and that he had practised four years in Haverhill. In his petition to the court he claimed that he was a graduate of a legally chartered college having power to confer degrees in medicine and therefore wrongly denied registration. The Board in its reply to the declarations of the petitioner asserted that the college named was a fraudulent institution and under the laws of Vermont was not authorised to confer medical degrees ; the judge ruled accordingly.

Selection.

THE THERAPEUTIC VALUE OF ARSENAURO.[1]

BY A. P. BUCHMAN, M. D., Fort Wayne, Ind.

TO FULLY appreciate the therapeutic value of a drug one must understand its limitations. No remedy can be made to do more than a limited number of things. To ascertain just what pathologic conditions are modified or changed for the better by a given therapeutic agent is a task of no mean importance, yet an absolute necessity when we aim to be rational in our methods.

For the past four years arsenauro has been one of the chief factors in my therapeutic armamentarium because of its almost universal happy effects in the special line of work that I have, almost exclusively, engaged in. The body of work has been in the field of denutrition and false metabolism depending remotely upon gastric and intestinal indigestion.

1. Read before the Mississippi Valley Medical Association, at Louisville, October 7, 1897.

It is not my purpose at this time to classify and enumerate an extensive list of such patients, but rather to give a very short clinical history of a type case in which the phenomena that reached the threshold of consciousness were sufficiently distinct to induce the opinion that a diverse etiology, rather than a single line of cleavage, was necessary in order to reach a logical demonstration of the causative factors in operation, and therefore rationally outline a therapeutic course destined to terminate in satisfactory results.

Abnormal metabolism and denutrition express themselves in direct relation with constitutional idiosyncrasies, hygienic environments and the vulnerability of the organism. Bearing this in mind we can comprehend why one patient will present a pathology of the lungs, another a kidney affection and still another a disease of the nervous system, while the point of departure from the health line in all is the same.

The first case in which I noticed gratifying results following the exhibition of arsenauro, was that of a traveling insurance adjuster who had suffered with gastric indigestion over a period of five years, in consequence of which his blood stream was impoverished, his nervous system shattered and the whole organism working at the lowest possible pressure. The particular symptom that brought him to me was insomnia. He was forced to quit work on this account. A further description of this case is unnecessary, as the clinical picture is familiar to everyone. A thorough cleansing and disinfection of the digestive tube was the first step, after which I carefully regulated the diet so as to insure the greatest quantity of nutrition for the least amount of energy expended by the digestive forces. Bathing, massage and electricity were ordered. The usual carminative and tonic drugs were exhibited. This course was persisted in for a month, during which there was noticeable betterment, but not sufficient to satisfy either the patient or myself. I now withdrew all former drugs and gave him arsenauro in ten drop doses four times daily. In ten days the patient was sleeping comfortably, eating and digesting fairly well, and altogether was sufficiently recovered to go to work moderately. After sixty days' constant use of the drug he announced himself as having entirely recovered and able to perform the exacting work required of him with ease and pleasure.

The recital of this case will suffice to illustrate the groove into which arsenauro fits so perfectly. It changes the chemical move-

ment in the blood plasma. The movement of the atoms thus initiated continues ; new material takes a more pronounced part in the various phenomena of motion and life ; the lymphatic glands, whose office it is to supply fresh material to the blood and nervous system, are changed to healthy action, their products become normally reconstructive ; cell digestion is stimulated and the blood is improved up to a normal standard.

To accomplish these results, however, it is not enough to simply give arsenauro. I have tried to expose the preparatory work which is absolutely essential and without which arsenauro, like any other drug given out of time and place, will yield only negative or indifferent results.

I have never secured from Fowler's solution the fully desired arsenic results which have invariably followed the administration of arsenauro, and yet, as Dr. Stuckey over a year ago pointed out in his scientific paper, the average dose of arsenauro contains very much less actual metallic arsenic than does Fowler's solution. We evidently have an entirely new agent in arsenauro, something more than the mere combining of arsenic and gold, for by evaporating arsenauro you have a resultant crystal which is not the crystal of arsenic, nor is it the crystal of gold, but a crystal such as I have never seen before. I would lay emphasis upon the point that I have observed no evidence of arsenical poisoning from arsenauro. It does not produce cumulative effects, but is easily and promptly assimilated.

PRURITUS ANI.

MATHEWS says that pruritus ani is the most intractable of all the diseases of the anus or rectum, and deserving of our earnest consideration and attention, and I am sure that those of you who have seen this disease will most heartily concur in that statement. It is absolutely necessary to remove the exciting cause or causes in these cases to make a permanent cure. We grant in the outset that this cannot always be accomplished, but these are decidedly the exceptions rather than the rule. Among the exciting causes that are local we will mention pediculi, eczema, erythema (in fat people), thread worms (which are to be found in the radiating folds at the margin of the anus), lack of cleanliness, the disease known as eczema marginatum (which is most easily cured by rubbing well into the parts night and morning for a week or so

an ointment containing from ten to thirty grains of chrysophanic acid to the ounce of vaseline), hemorrhoids, fistula, fissures and the like. Some other causes that we would consider as reflex or constitutional are stone in the bladder, chronic inflammation of the deep urethra, stricture of the urethra, pelvic tumors, uterine derangements, functional disorders of the liver, diabetes, constipation, and lastly, but not least, gastro-intestinal disorders, especially that form that is so commonly known as atonic dyspepsia superinduced by smoking, drinking, irregular eating, irregular sleeping; in fact, you might say irregularity in all the walks of life. The treatment which tends to the best results is a light breakfast, no luncheon, a good dinner, plenty of hot water an hour before and between meals and following the homely road of correct habits. Many and innumerable are the local and constitutional remedies we have for the relief of this affection, none of which will I burden you with, but refer you to the text-books on the subject. We do not wish to be thrown out upon the broad field of empiricism or be known as a routinist when we suggest one method which is conducive to the best results in all these cases where no exciting cause or causes remain, that of stretching the rectum under anesthesia for from three to five minutes. After this take a sharp curette and simply remove every vestige of the thickened and parchment-like membrane. When this will have been done you will have a complete change in the condition of the parts; you will have converted a chronic inflammation into that of an acute, whose tendency is always to recovery. You will have removed the contraction of the sphincter muscle, which will admit of a freer circulation of blood through the parts, and taken off entirely the pressure on the terminal filaments of the nerves.—*Maryland Medical Journal.*

AN OINTMENT FOR PRURITUS.

℞	Mentholi	4	(ʒi.)
	Cerat. simplicis	64	(℥ii.)
	Ol. amygdal dulcis	32	(℥i.)
	Ac. carbolici	4	(ʒi.)
	Pulv. zinci oxidi	8	(℥ii.)

M. Sig.—Apply morning, noon and night, after cleaning the parts. —*Dr. C. B. Kelsey.*

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EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE ninety-second annual meeting of this society was held at Albany, January 25, 26 and 27, 1898, under the presidency of Dr. Seneca D. Powell, of New York. The society on this occasion returned to its old quarters in the city hall, which, on the whole, served quite as well for a meeting place as did the Jermain hall at a cost of $75 a day.

The business committee, consisting of Dr. W. G. Macdonald, chairman, Dr. Ernest Wende, of Buffalo, and Dr. B. Farquhar Curtis, of New York, had prepared an elaborate program which was disposed of after the usual fashion—namely, hurried reading of papers, limitation of debate, and in some instances failure of authors to appear. An effort had been made to keep the number of papers within a limit that would render the program easily handled during the appointed time. But it appears to be impossible to do this when as now so many readers claim the right to be heard in this great state society.

The president's inaugural address was a model of brevity and conciseness, expressed in forceful and elegant English. He made but few recommendations, some of which were of a negative character. He advised against changing the place of meeting from Albany to other cities in the state ; that no change be made in the method of electing officers ; that better safeguards be thrown around the sale of poisons, dwelling upon the number of cases of carbolic acid poisoning ; reported a list of members deceased during the year ; and commended the work of the state medical examining board.

The principal legislative business of the first morning session involved three questions of importance : first, the redistricting

measure proposed by Dr. William Browning, of Brooklyn; second, a proposal to change the place of meeting from Albany to other prominent cities in the state; third, and finally, a suggestion to change the method of electing officers, abolishing the nominating committee and taking the subject to the floor. Happily these three propositions were voted down. Every change in the organic law of a society should be justified on grounds of improvement, simplicity, economy or justice. As none of these propositions were sustained by such a foundation, they very properly fell to the ground.

The scientific part of the program dealt with many questions of professional interest. Two papers, at least, were of public concern. Dr. John H. Pryor, of Buffalo, presented one of these under the title, What shall the state and the county do for the consumptive? He pointed out that 13,000 consumptives die annually in the state of New York, and that many might be saved by appropriate care during the incipient stages of the disease. He urged the establishment of a proper home for such persons in the Adirondacks. The essential features of the paper were referred to the committee on hygiene for consideration and report. We understand that resolutions have been introduced in both houses of the legislature inquiring into the feasibility of the plan proposed, on which a hearing has been fixed at an early day. On another page in this issue we make further reference to this important subject.

The other paper of public interest was presented by Dr. J. B. Ransom, of Dannemora, entitled Expert medical testimony. For some time past both the legal and medical professions have been measurably united in the opinion that reform was necessary in this most important field. There has been considerable difficulty, however, in arriving at, or agreeing upon, a proper plan for relief and improvement. Dr. Ransom said that it is now generally agreed that it would be better to have medical experts appointed by the trial judge in each case, and to have some fixed standard of qualification. In another place in the JOURNAL we publish a paper by Tracy C. Becker, Esq., lecturer on criminal law and procedure and medical jurisprudence, in the law department of the University of Buffalo, that may be read with interest and profit as bearing direct relation to this subject. Especially will there be amazement at the difficulties Mr. Becker experienced in obtaining a modification at the hands of the legislature of the present system relating to coroners' juries.

The usual X-ray exhibition appropriated the evening session of the first day. This afforded an opportunity for the enthusiasts on electrical photography to display their ingenuity in reproducing pictorial illustrations of medical and surgical lesions, as well as in demonstrating teaching facilities or possibilities afforded by Röntgen's discovery. We may appropriately remark that this exhibition was unusually attractive and instructive.

The president chose for the subject of his anniversary address, The obligations of the physician and the layman to each other. This was delivered Wednesday evening in the senate chamber as usual. The theme was well handled despite its brevity, and will furnish a subject for much thought. After the address the president entertained the society by a reception at the Albany club, this taking the place of the customary annual dinner. We understand that this was the president's method of entering his protest against a tradition in the society of taxing the president for all deficiencies at the annual dinner. We are glad to know that this question has been raised in this manner and we hope it will lead to an abolishment of the practice.

Happily the society was not inflicted with a discussion on the dispensary bill proposed by the Medical Society of the County of New York. It was evident to the proponents of the measure that it would not receive the endorsement of the society in its present form, hence they very wisely did not raise the issue.

The society nominated, to fill vacancies on the state board of examiners, the following names: Drs. Eugene Beach, of Gloversville, J. P. Creveling, of Auburn, H. D. Wey, of Elmira, and Daniel Lewis, of New York. The state board of medical examiners elected the following officers: president, Dr. William Warren Potter, of Buffalo; secretary, Dr. Maurice J. Lewi, of New York; members of the question committee, Dr. George Ryerson Fowler, of Brooklyn, and the secretary, Dr. Lewi.

The society elected the following officers for the ensuing year: president, Dr. John O. Roe, of Rochester; vice-president, Dr. E. F. Brush, of Mt. Vernon; the secretary, Dr. Curtis, and the treasurer, Dr. Porter, both of Albany, were reëlected.

There are two important improvements, if not reforms, that, it seems to us, this society should institute. The first is that it should appoint its meetings to be held during three full days. There is no good reason that can be offered for the exodus of the members Wednesday evening, leaving comparatively empty benches

as an audience for the readers Thursday morning. Other states of far less importance devote three full days to their medical society work. When this society does likewise it will enable itself to dispose of its program in a more satisfactory manner.

The other suggestion we offer is that hereafter the members be assessed for the full cost of each plate at the banquet, or else, if present prices be retained, a deficiency bill be appropriated payable out of the treasury. In any event it is high time for the society to abolish the disgraceful method of taxing the president for deficiencies resulting from its annual feast.

SHOCK.

ALTHOUGH the pathology of shock is still a debatable question, the treatment has been perfected until the results now obtained are very satisfactory both to patient and operator. The different theories regarding the pathology have undergone some criticism and experimental inquiry during the past year, especially by two American investigators, Dr. Eugene Boise, of Grand Rapids, Mich., and Dr. George W. Crile, of Cleveland, O. The latter's researches formed the essay to which was awarded the Cortwright prize fund of the College of Physicians and Surgeons of New York for 1897. The former in several papers has formulated a theory which appears to answer all the symptoms generally met with in shock following and during surgical operations.

Dr. Boise, in contributions to the transactions of the American Association of Obstetricians and Gynecologists, has attacked the old theories of paresis of the sympathetic system, paresis of the splanchnics, paresis of the cardiac and respiratory ganglia, paresis of the circulatory system, and has erected upon the ruins of these erstwhile theories another, which in many respects is worthy of more confidence and belief. To him nearly all the symptoms of shock can be explained on the theory that a *hyperirritation* of the entire sympathetic system is present and as a result we have stimulation of the vasomotors, contraction of the arterioles and a spasmodic action of the heart. The condition of the skin, pupils, heart's action, feeble pulse, scanty secretion of urine and the like, can all be easily explained on the theory of sympathetic stimulation, and when the therapeutic measures in vogue seem to meet the indications present the theory gains thereby in strength. Thus nitrite of amyl, nitroglycerine, morphine and moist heat are

regarded as sedatives to the sympathetic system and relaxants of the arterioles and produce most favorable results.

Dr. Crile has experimented more with the blood pressure as affected by manipulation and irritation of the various organs and tissues of the body, and favors the treatment by intravenous injections of warm saline solutions along with a dilute solution of strychnia, slowly injected into the rubber tube of the infusion apparatus, thus entering the circulation directly in the stream instead of injecting it into the patient.

Dr. Crile's prize essay is to be published by the Lippincotts in the spring.

STATE CARE OF CONSUMPTIVES.

AT THE recent meeting of the medical society of the state of New York, Dr. John H. Pryor, of Buffalo, presented a paper on The state and county care of the consumptive. After citing statistics showing the great mortality from consumption in this state, the effects of attempts at prevention were considered and the conclusion reached that while the number of deaths in proportion to the population decreased, the percentage of deaths from the disease seems to increase. About 13,000 of the population die from consumption in this state, or about 11 per cent. of all deaths are due to that cause.

The necessity for the proper care of incurable cases in special hospitals, with a view to segregation and better opportunity for improvement, was urged as a humane and sanitary measure. These methods of attacking consumption, if thoroughly employed, are scientific and promising, but in the opinion of the author were insufficient in that no provision is made for curable cases. The plan advised is experimental care of the incipient consumptive by the state, through the establishment of a colony for consumptives during the curable stage of the disease in the Adirondacks, on the state reserve. It can no longer be questioned that from 25 to 50 per cent. of incipient consumptives may recover under proper climatic and hygienic conditions. The Adirondack region furnishes the best health resort for this purpose east of Colorado and the state owns an enormous tract of land which could not be put to better use. While the well-to-do may be able to seek the only relief known for this disease, the vast majority of consumptives are denied this opportunity. Those in moderate circumstances or

the indigent sick must struggle until all hope is lost and they receive aid when too late to be of any real benefit.

It is an admitted fact that thousands of consumptives die annually in this state because they are too poor to avail themselves of the advantages proposed by Dr. Pryor. There is little excuse at present for neglecting to make an early diagnosis and the chance could be given to many to get well and be useful citizens. We seem to be working at the wrong end of a problem and, as Dr. Pryor says, the care of the consumptive is an anomaly in our system of charities. The indigent sick when suffering from any other disease are given the best medical treatment, but the consumptive whose only chance for recovery must be provided by changed climatic conditions is entirely lost sight of. The cities and counties expend large sums of money for the relief of the patient and his family after any hope for his recovery has vanished. Until then he is neglected and the increasing knowledge of the infectiousness of the disease makes his life and efforts to gain support more and more difficult.

Probably the greatest affliction which a desirable citizen suffers from today is consumption, because nature affords him a chance to recover near his home, but the expense is prohibitive in most cases. It would be much wiser to spend the money where it will bring a return than to employ it to comfort the hopeless sufferer. Why not support the consumptive until he is well and give him treatment where there is some promise of a good result? The purpose of such a colony should not be to care for the poor alone, but those who can pay all or a part of the cost should be given this necessary opportunity. There is no reason why a colony for consumptives should not be made partially self-supporting. After the period of rest has elapsed some of the patients, perhaps, might be placed upon light duty of some kind to avoid the dangers of pauperism. To be at all successful only incipient cases should be admitted and the results will depend largely upon the care used in selecting cases. Unless developed slowly and cautiously the expense would be great.

The strongest humane argument in favor of the plan is the strongest economical one against it. It is so much needed and the demand will be so great for relief that the cost might be enormous. At any rate the great scourge of tuberculosis must be attacked by the state in some way, at some time, and the scheme seems to be rational and feasible. We know of no other method which has

received such widespread support and commendation. The Charlotte (N. C.) *Medical Journal*, for October, 1896, makes editorial reference to this subject as follows: "The state should erect sanitariums in mountainous districts and give the poor the same climatic advantages enjoyed by the rich." The article referred to we understand is from the pen of Dr. Julius Ullman, of this city. The only objection seems to be the fear of another large expense added to the state and the creation of a new institution to care for a new class of dependents. Careful consideration of the philanthropic side of the matter should remove this hesitancy. A small colony could be started on the cottage plan and time could be trusted to show the necessity for growth. The expense could be controlled and wisely increased by those who have the power to make appropriations.

It is probable that the legislature will appoint a committee to investigate the suggestions and plans presented at the Albany meeting, and it is to be hoped that the importance of the matter will lead to a thorough examination of the means for lessening the number of consumptives in this state.

Under the head of society proceedings in this issue we publish an abstract of Dr. Kelly's paper read at the last annual meeting of the Southern Surgical and Gynecological Association, relating to the sources and diagnosis of pyurias. Dr. McMurtry's discussion on the subject is published in full, which we think will make instructive reading for those interested in this important subject. So many false claims have been made in society discussions and medical journals for the much-vaunted ureteral catheterisation for both diagnosis and treatment, that it is highly satisfactory to have the subject set forth to the profession in its true light.

The appalling disaster that befell the United States battleship Maine, in Havana harbor, February 15, 1898, is a subject of comment all over the world, and has brought messages of sympathy to the government at Washington from almost every civilised ruler. The great loss of life and the large number of maimed present the most paramount questions connected with this explosion. The value of the ship, though great, is of secondary moment. It is gratifying that the medical officers escaped injury, thus enabling them to succor the wounded and contribute to their immediate

relief. We make reference to this subject here, and at this time, to express our sympathy with the medical staff of the navy and especially to surgeon Heneberger and his assistants for the trying position in which they are placed. The destruction of the Maine, when peacefully riding at anchor in smooth water, is a reminder that at no time in peace or war is service in the naval medical staff a sinecure or place of safety.

Personal.

Dr. Benjamin Lee, of Philadelphia, has recently been appointed health officer of that city. He is a son of the late Bishop Lee, of Delaware. During the war he acted as surgeon in the 22d Regiment N. Y. N. G. He has been a close student of hygiene, and is a member of many learned societies. As secretary of the state board of health of Pennsylvania for a number of years, he rendered important service to the cause of sanitation, converting the organisation from a mere bureau of vital statistics into an active and efficient agency for promoting the health of the people.

Dr. James F. W. Ross, of Toronto, read a paper before the Buffalo Academy of Medicine, Tuesday evening, January 25, 1898, entitled Torn and punctured wounds of the uterus and vagina; symptoms, prognosis and treatment.

Obituary.

Dr. John Cronyn, of Buffalo, died at his home in this city, No. 55 West Swan street, at 6 o'clock Friday evening, February 11, 1898, aged 72 years. He was stricken with paralysis on Monday night previous to his death, and though he rallied once or twice during the week, fatal symptoms supervened two days before his death and he gradually sank, becoming unconscious a few hours before his death. He died surrounded by his family and medical attendants.

Dr. Cronyn was born December 15, 1825, at Black Rock, a suburb of Cork, Ireland. He received his preliminary education in a school at Cork, under the supervision of his father and after

he came to America was placed in charge of private tutors in Knox's college, Toronto. He came to this country in 1837 in company with his widowed mother, five brothers and one sister, and located at Toronto. In a few years he began the study of medicine, which he pursued in the University of Toronto, and passed his examinations for the degree of M. D. in 1850. He did not receive his diploma, however, until a few years later, when the Canadian government removed all sectarian restrictions. He then applied for and obtained his medical degree, and for his thesis was awarded the chancellor's prize. He first located for practice at Fort Erie, where for several years he was local superintendent of schools and reeve of that place. In 1859, Dr. Cronyn came to Buffalo and established himself at the corner of Church and Pearl streets. He rapidly gained an active professional practice and soon was appointed first as surgeon and next as physician-in-chief of the medical staff of the Buffalo Hospital Sisters of Charity, which latter office he held until his death. The medical department of Niagara University was established in 1883 largely if not principally through his instrumentality, and in that college he held the chair of principles and practice of medicine, and was president of the medical faculty from the foundation of the school until his end. In 1888, Niagara University conferred upon him the degree of Ph. D., and in 1893 that of LL. D.

Dr. Cronyn was president of the New York state medical association (1888), twice president of the medical society of the county of Erie (1875–1876), twice president of the Buffalo medical and surgical association (1876–1883) and an honorary member of the Ontario medical association. For several years he was a member of the board of managers of the Buffalo state hospital and a part of the time served as president of the board.

Dr. Cronyn was a literal student of medicine, well versed in professional lore, easy and ready in debate, an excellent teacher and a courteous gentleman. He acquired a very large practice, was often called long distances as a consultant and justly achieved a wide fame as a family physician. He had a love for music, art and religion, and died a consistent believer in the Roman catholic faith. His funeral services were held in St. Joseph's cathedral, Monday, February 14, 1898. The remains was escorted from the Cronyn home to the cathedral by members of the faculty of Niagara University and the medical society of the county of Erie. The students of Niagara University stood in a double line at the

IN MEMORIAM.

JOHN CRONYN, M. D.

1825-1898.

By courtesy of the Cotholic Union and Times.

portico of the cathedral and the casket was borne between them. During the service many persons stood in the aisles of the church, as there were not enough seats for all.

The bearers were: Dr. Lawrence G. Hanley, Dr. Joseph P. F. Burke, Dr. Edward M. Dooley, Dr. Francis J. Carr, Dr. David L. Redmond, Dr. Sidney A. Dunham and Dr. Frank W. Maloney. The honorary bearers were: Dr. Thomas Lothrop, Dr. Alvin A. Hubbell, Dr. Henry D. Ingraham, Dr. Herman Mynter, Dr. William H. Pitt, Dr. Rollin L. Banta, Dr. Cornelius C. Wyckoff and the Hon. Thomas V. Welch, of Niagara Falls.

A solemn requiem was celebrated, the following being the officers of the mass:

Celebrant—The Rev. John D. Biden, rector of the cathedral.

Deacon of the mass—The Rev. T. P. Lynch.

Sub-deacon—The Rev. P. J. Enright.

Master of ceremonies—The Rev. John J. Sheehan, chancellor of the diocese.

Within the sanctuary were the following clergymen: The Very Rev. M. P. Connery, vicar-general of the diocese; the Rev. Thomas Donoghue, D. D.; the Rev. Patrick Cronin, editor of the *Catholic Union and Times*; the Rev. P. Hoelscher, D. D.; the Rev. Luke A. Grace, D.D., of Niagara University; the Rev. James F. Mooney; the Rev. L. Bonvin, S. J., of Canisius college; the Rev. Father Hickey, C. M.; the Rev. J. O. M. Hayden, C. M.; the Rev. Daniel L. Walsh of the Working Boys' Home; the Rev. M. J. Keane, the Rev. John J. Sheehy, the Rev. Jeremiah McGrath and the Rev. L. Martinelli.

The Very Rev. P. McHale, C. M., president of Niagara University, preached the funeral sermon. He spoke eloquently of the many virtues of the deceased physician and impressed on his hearers the deep loss the community has sustained.

The burial was at Holy Cross Cemetery. Dr. Cronyn is survived by a widow and six children. The children are the Misses Elizabeth, Jennie, Juliana and May, and Thomas and Dr. John L. C. Cronyn.

Dr. Theophilus Parvin died at his residence in Philadelphia, January 29, 1898, aged 69 years. His death was attributed to cardiac asthma, complicated by uremia and edema of the lungs. It was thought, however, that he would recover even up to a very late day of his illness.

Dr. Parvin was born at Buenos Ayres, A. R., January 9, 1829. His father, who was a presbyterian missionary, sent him to this country to be educated while he was yet a mere lad, and he entered the preparatory department of Lafayette college when 11 years of age. A few years afterward he entered the Indiana State University, from which he graduated in 1847. Afterward he taught school at Lawrenceville, N. J., studied Hebrew in Princeton theological seminary, and entered the medical department of the University of Pennsylvania, from which he took his doctorate degree in 1852. He served as resident physician at Wills Eye hospital, as surgeon on the steamer Tonawanda—a New York and Liverpool packet—and then removed to Indianapolis, where he remained in practice until 1864. He was then elected professor of materia medica at the Ohio Medical College, Cincinnati; in 1869 he became professor of obstetrics in a medical school at Indianapolis and later held the same chair in the University of Louisville. In 1883 he removed to Philadelphia, having been chosen professor of obstetrics and diseases of women and children in Jefferson Medical College.

Dr. Parvin was a member of many American and foreign medical societies, of some of which he had been president. He was an accomplished teacher, a delightful conversationalist and a man of great scholarly attainments. He had a decided taste for literature and some of his contributions to the medical periodical press are marked for their pure English, elegant diction and finished rhetoric. We recall at this time, especially, his review of Goodell's first edition of Lessons in Gynecology, that appeared in the *American Journal of Medical Sciences*. Parvin's treatise on the science and art of obstetrics, a well-known text-book, is now passing through its third edition, and he was also the American editor of Winkel's diseases of women, both of which have been reviewed in the columns of the JOURNAL. Dr. Parvin has left the impress of his talent upon the annals of American medicine, especially of obstetric medicine, quite as markedly as any man of his time.

He is survived by a daughter, Mrs. James Philip Baker, of Indianapolis, and two sons, Mr. Theophilus Wylie Parvin, of Pittsburg, and Dr. Noble Butler Parvin, who is now engaged in the practice of medicine in Philadelphia.

DR. MICHAEL TALBOT, of Niagara Falls, died at the Buffalo hospital Sisters of Charity Wednesday morning, January 26, 1898, in the 52d year of his age. He had been ill with pneumonia for a

few days, but the fatal termination was somewhat sudden and unexpected.

Dr. Talbot was born at Parsonton, King's county, Ireland, May 12, 1846. He received his early education in the schools at Belfast and at the age of 18 he came to America, reaching New York in 1864. Soon afterward he came to Buffalo, spent two years in the school of the Christian Brothers, then entered the Buffalo University Medical College, from which he received his medical degree in 1871. He then was appointed resident physician at the Sisters of Charity hospital and when his term of service expired he located at Suspension Bridge, where he remained until his death. He acquired a large practice and lived to see the village of Suspension Bridge grow until it became part of the city of Niagara Falls.

Dr. Talbot was a member of the New York State Association of Railway Surgeons, of the Medical Society of the County of Niagara and of the Niagara Falls Academy of Medicine. He is survived by a widow and five children : Mrs. Dr. McCarthy, Misses Anna and Stella Talbot and Robert and Frank Talbot, all of Niagara Falls.

Dr. Edward Constant Seguin, of New York, died at his home, No. 47 West Fiftieth street, Saturday, February 19, 1898, in the fifty-fifth year of his age. He was born at Paris in 1843, was the only child of Dr. Edward O. Seguin. He graduated from the college of physicians and surgeons in New York in 1864. Meanwhile, he had served in the medical department of the army, first as hospital dresser, then medical cadet, and finally as assistant surgeon U. S. volunteers.

Dr. Seguin became one of the most distinguished specialists in diseases of the nervous system, and has written many scientific papers pertaining to that department of medicine. He was one of the founders of the American Neurological Association and of the New York Neurological Society ; and these, with the New York Pathological Society received most of his attention. He was also a member of several other American and European medical societies.

Dr. Seguin was a man of affable manners, an ornament to the profession, and he will be sadly missed by his professional colleagues and friends.

Society Meetings.

THE Buffalo Academy of Medicine held meetings during the month of February, 1898, as follows :

Section on Surgery.—Tuesday evening, February 1st, program : The technique of hysterectomy, both vaginal and abdominal, by Dr. Dudley P. Allen, professor of surgery and clinical surgery, Western Reserve University, medical department, Cleveland, O. Exhibition of a case of penetrating gunshot wound of the head, by Dr. Eugene A. Smith.

Section on Medicine.—Tuesday evening, February 8th, program : Clinical examination of blood, by Dr. Helene Kuhlman. Sputum, by Dr. Nelson Russell.

Section on Pathology.—Tuesday evening, February 15th, program : Toxic degeneration of the nervous system, by Prof. Ira Van Gieson, director pathological institute, New York state commission in lunacy ; discussion by Drs. Crego, Hurd and Krauss.

Section on Obstetrics and Gynecology.—Tuesday evening, February 22d, program : Etiology, pathology, diagnosis and treatment of myofibroma of the uterus, by Dr. Henry D. Ingraham.

THE American Academy of Medicine will hold its twenty-third annual meeting at Denver, Colorado, on Saturday, June 4th, and Monday, June 6, 1898, in the Brown Palace Hotel. It is planned to hold three sessions on Saturday beginning at 10 A. M., at 3.00 and at 8.00 P. M. Another session will be held on Monday, at 10 A. M., at which time it is hoped all the business can be completed, affording the fellows an opportunity to attend the meetings either of the Association of American Medical Colleges or the National Confederation of State Medical Examining and Licensing Boards, which meet on this day. The reunion session will be held Monday evening. The following papers have been promised :

Dr. L. Duncan Bulkley, of New York, the president's address ; Dr. Charles Denison, of Denver, The advantage of physical education as a prevention of disease ; Dr. Thomas C. Ely, of Philadelphia, The importance of training the special senses in the education of children ;

Dr. J. Edgar Fretz, of Easton, Pa., Some criticisms on the questions of the medical examining boards by a recent graduate; Dr. G. G. Groff, of Bucknell University, Lewisburg, Pa., The necessity of medical supervision in school-life; Dr. Bayard Holmes, of Chicago, Growth and strength and its relation to education and medicine; Dr. Henry M. Hurd, of Baltimore, How much to educate the growing brain; Dr. Woods Hutchinson, of Buffalo, The muscular basis of education; Dr. Edward Jackson, of Philadelphia, The care of the eyes during school-life; Dr. Elmer Lee, of New York, The interdependence of healthy bodies and healthy brains; Dr. J. C. Lichty, Clifton Springs, N. Y., The modern sanitarium and its relation to the general medical profession; Dr. Charles McIntire, of Easton, Pa., Snags in the course of the medical examining boards; Dr. Rupert Norton, of Washington, D. C., The child's brain as illustrated by recent neurologic studies; Dr. F. T. Rogers, of Providence, R. I., The ethical advertiser; Dr. J. T. Searcy, of Tuscaloosa, Ala., How education fails—physiologically considered; Dr. Charles G. Stockton, of Buffalo, The kindergarten; Dr. James L. Taylor, of Wheelersburg, O., The amount of work a growing brain ought to undertake; Dr. Casey A. Wood, of Chicago, Kindergarten and primary grade work in the public schools and its influence upon the eyesight.

Fellows desiring to contribute are requested to send their titles to the secretary, Dr. Charles McIntire, Easton, Pa.

The Medical Society of the State of New York at its last meeting elected the following-named officers and committees to serve for the ensuing year: President, John O. Roe, 28 North Clinton street, Rochester; vice-president, E. F. Brush, Mount Vernon; secretary, Frederic C. Curtis, 17 Washington avenue, Albany; treasurer, Charles H. Porter, 103 Lancaster street, Albany. Committee of arrangements, Samuel B. Ward, 281 State street, Albany; Wm. J. Nellis, Albany; Reynold W. Wilcox, New York. Committee on by-laws, H. D. Wey, Elmira; Nathan Jacobson, Syracuse; F. C. Curtis, Albany. Committee on hygiene, Henry R. Hopkins, 433 Franklin street, Buffalo; E. H. Bartley, Brooklyn; C. E. Bruce, New York; J. M. Mosher, Albany; O. W. Peck, Oneonta; H. F. Hart, Shrub Oak; George Seymour, Utica. Committee on legislation, Frank Van Fleet, 116 East 82d street, New York; Arthur G. Root, Albany; Ernest Wende, Buffalo. Committee on ethics, Evarts M. Morrell, City Island; George McNaughton, Brooklyn; Louis A. Weigel, Rochester. Committee

on prize essays, J. M. Van Cott, Brooklyn; Andrew MacFarlane, Albany; William S. Cheesman, Auburn. Committee of publication, F. C. Curtis, Albany; Daniel Lewis, New York; William Warren Potter, Buffalo; Charles H. Porter, Albany.

The next annual meeting of the society will be held at Albany, January 24 to 26, 1899.

THE national confederation of state medical examining and licensing boards will hold its eighth annual meeting, Monday, June 6, 1898, at the Brown Palace Hotel, Denver, Colorado, at 10 o'clock A. M. The following are the officers and committees for the current year: President, Dr. William Warren Potter, 284 Franklin street, Buffalo, N. Y.; vice-presidents, Dr. E. L. B. Godfrey, Camden, N. J., and Dr. Wm. Bailey, Louisville, Ky.; secretary and treasurer, Dr. A. Walter Suiter, Herkimer, N. Y. Executive council, Dr. William S. Foster, chairman, Pittsburg, Pa.; Dr. Joseph M. Mathews, Louisville, Ky.; Dr. Hugh M. Taylor, Richmond, Va.; Dr. W. H. Sanders, Montgomery, Ala., and Dr. Charles K. Cole, Helena, Montana. Committee on minimum standards, Dr. N. R. Coleman, chairman, Columbus, O.; Dr. Gardner T. Swarts, Providence, R. I.; Dr. T. J. Happel, Trenton, Tenn.; Dr. Augustus Korndoerfer, Philadelphia, Pa., and Dr. W. R. Tipton, Las Vegas, N. M.

The American Medico-Psychological Association will hold its fifty-fourth annual meeting at St. Louis, Mo., May 10–13, 1898. Arrangements have been made by the committee for the accommodation of members at the Southern hotel, where all meetings of the association will be held. Those interested should communicate with the secretary, Dr. C. B. Burr, Flint, Mich.

THE Niagara Falls Academy of Medicine held its regular monthly meeting at the office of Dr. Leo-Wolf, Monday evening, February 7, 1898. Dr. J. H. Miller read a paper entitled Empyemia, which was discussed by the members present. Dr. McBlain's paper, read at the January meeting, entitled Chronic and acute ovaritis, was also discussed. After attending to some business matters the meeting then adjourned.

Hospital Note.

It was announced recently in the newspapers that a number of Buffalo physicians, including Drs. Bernhard Cohen, of Niagara street, J. N. Goltra, of Elmwood avenue, John E. Bacon, of Prospect avenue, William H. Thornton, of Niagara street, C. A. Wall, of Hudson street, F. E. Luke, of Richmond avenue, L. J. McAdam, of Jersey street and Frederick Millener, of Niagara street, met at the University Club, January 20, 1898, and organised an association to be known as the Buffalo Polyclinical Association.

Their intention in forming the association is ultimately to build another hospital in this city and the proposition was discussed by all present. A number of suggestions were offered as to the best mode of procedure in perfecting preliminary arrangements.

Drs. Goltra and Wall were appointed a committee to draft a constitution and by-laws. Other meetings will be held for the further discussion and perfecting of the plans.

Book Reviews.

Traumatic Injuries of the Brain and Its Membranes. With a special study of pistol-shot wounds of the head in their medico-legal and surgical relations. By Charles Phelps, M. D., Surgeon to Bellevue and St. Vincent's Hospitals. Octavo, pp. xiv.—582. With forty-nine illustrations. New York: D. Appleton & Co. 1897.

In these days of books written by authors possessing insufficient experience to qualify them for the work, it is refreshing to read such a masterly treatise as that given us by Dr. Phelps, based as it is upon an experience of 500 cases.

The work is divided into two parts, the first treating of traumatic injuries of the brain and its membranes; the second, of pistol-shot wounds of the head in their medico-legal and surgical relations. Each part rivals the other in the quality and perfection of its contents. In part one the author begins with a preliminary consideration of cranial fractures, based upon a study of 180 cases, in which, as elsewhere in the book, originality is conspicuous. After studying the mechanism of fractures, particularly the basal forms, the author comes to the conclusion that the mechanism is not always the same and that some of them formerly attributed to *contre-coup* are of variable as well as questionable origin; that whether produced by insupportable distortion of the elastic vault, or by transmission of force through osseous structure to the point

of discharge of same, or propagated by undulations in the brain substance is not yet known.

Fractures are not significant as osseous lesions, but because of their liability to intracranial complications. As the author tersely puts it, it is the complication and not the fracture which dominates the case. These complications include lacerations, contusion, hemorrhage and septic inflammation in both brain and meninges, to all of which is added hemorrhage from osteal vessels. The symptomatology and diagnosis are then considered. By tracing the fissure from its origin in the vault, by noting the situation of external hemorrhages, serous discharges and extrusions of brain matter, by observing the location of pain and the concurrence of complicating intracranial lesions, the author believes that most cases of basal fracture may be accurately diagnosticated.

From the prognostic point of view cranial fractures in themselves are only exceptionally of importance. The author says their prognosis is really the prognosis of their complications. The fatalities are usually due to concomitant lesions. The treatment of the fracture is local; of the complication, general. Shock contra-indicates local interference (control of hemorrhage excepted). In the words of the author, the general principle that the resort to local measures must await the restoration of nervous and vascular force, except for the relief of hemorrhage by which depression is prolonged, is a fundamental law in surgery. After reaction is established, then primary rather than secondary operation is indicated and its performance becomes imperative. In case of doubt, direct inspection and touch of the injured parts are advised, depressed portions raised, clots removed and the like.

The chapter upon pathology is most clear and satisfying. The intracranial and traumatic lesions are classified primarily as hemorrhages, thromboses of sinuses, contusions, lacerations and their sequelæ, as: meningeal and parenchymatous inflammations (usually septic) and atrophy. What the author has to say under these headings is so condensed and important that direct quotation rather than an abstract is necessary to its proper appreciation. Such quotation space forbids and the reader must be referred to the work itself.

Two chapters are devoted to symptomatology, in which attention is first of all directed to the fact that symptoms without exception result from demonstrable organic change. They are grouped under the name of their pathogenic lesion and include (1) hemorrhages; (2) diffuse and limited contusion of the brain; (3) laceration of the brain; (4) secondary inflammations of the brain and arachnoid membranes (almost invariably pyogenic). Here again the information given the reader is so minute and extensive that only this general statement of its excellence can be given. The same remark is true of the chapters upon diagnosis, prognosis and treatment. Regarding the treatment, we cannot refrain from

quoting the author concerning the operative treatment of the various lesions previously discussed :

If in the general class of intracranial injuries operation is to be but infrequently done, the question of operation will be often raised and decision as to the course to be pursued will then entail grave responsibility, since error in judgment may deprive the patient of a chance for life by increasing the danger of an already critical condition. Action or inaction at the wrong moment has invited disaster on either hand ; but instances of too early or unwarranted operative interference by inexperienced surgeons outnumber those in which the ultraconservatism of their elders has led to a perhaps fatal neglect.

Later, regarding the operative treatment when encephalic lesions are independent of accessible cranial fracture, the author makes the following wise remarks :

Operation is not to be done as a so-called last resource, and because the patient is likely or sure to die without it, as he is with it, unless some blind chance interposes where reason affords no room for hope. Intracranial exploration will be defensible, as it is made with or without sufficient cause, and not as it may conform to an opinion deducible from a wide generalisation of results that it is a good or a bad procedure. Unless general rules can be made absolute, the obligation to determine in each instance the treatment to be pursued in accordance with the indications which it presents remains unimpaired, and the contention that more lives are lost by operative interference which is unnecessary than by its neglect when it is required has no relation to the exigencies of particular cases.

The general management of these cases is limited to the fulfilment of the indications directly afforded by symptoms, and include stimulation, cold to the head, mechanical restraint, control of nervous irritation and maintenance of strength of the individual.

Part II. deals with pistol-shot wounds, first in their medico-legal and second in their surgical relations.

The author, believing that a very great number of observations systematically made is essential to the formulation of rules which govern the infliction and reception of this type of gunshot wounds, made a large number of experiments upon the cadaver in which the caliber of the ball, its angle of incidence, the distance traversed by it, the length of the weapon, the character of the explosive, the density and thickness of the cranium and the special region involved were studied. The calibers selected were 0.22, 0.32, 0.38 and 0.44. The cartridges were of a single manufacture and the distances the same for each caliber, varying from absolute contact to 100 feet. Additional observations were made with pistols and cartridges of other makers, and also with smokeless in place of the black powder. The trials were made upon entire subjects recently dead, where the conditions present conformed as nearly as possible to those in the living.

The effects of pistol-shot wounds upon the head especially studied were lesions of the tegumentary coverings and of the cranium.

Intracranial lesions possessed for the author less certain value because of possible modifications due to post-mortem changes.

The specific effects noted included for the external soft parts the characteristics of the external wound of entrance, the burning of the skin or hair, smoke stains of the skin and the deposit of unburned grains of powder upon the surface or in the substance of the skin or subjacent wounded tissues ; and for the cranium, the peculiarities of the osseous wounds of entrance and of exit and the resulting fractures of the vault or base. To these were added an examination of the brain track for powder traces or bony fragments. The results obtained are concisely given and the various lesions admirably illustrated from photographs taken at the time of the experiments.

We cannot take the space to record even the generalisations made by the author from these experiments, but it may be safely affirmed that they are so complete and accurate that they will be used and quoted by medico-legal experts in the future.

Of pistol-shot wounds in their surgical relations, the author speaks in the same clear and concise way. The intracranial lesions characteristic of these wounds are contusion, laceration and hemorrhage.

Of symptoms the most common is unconsciousness, which is always present in the immediately fatal cases, and is unusually profound. For purposes of diagnosis the probe is the main reliance. Girdner's telephone probe is commended in suitable cases. The finger, where it can be used, fulfils the office of a probe admirably. Of the X-rays, the author's opinion is that as yet they are not of especial value, but have possibilities. The use of the sharp needle is advocated where for any reason the probe or finger is not sufficient. Summing up concerning the diagnostic means within our reach Dr. Phelps says :

> These several methods of search, guided by the observation of existing localising symptoms or of indications of injury to the opposite cranial wall, are the only means available for the discovery of the bullet. Their successful use requires not only manual skill, but quickness of perception and sagacity of interpretation in the study of the often obscure attendant conditions.

The treatment is divided into general and local, the former being in the main the same as applicable in similar cases produced by other forms of violence. The local treatment includes thorough cleansing, removal of fragments, incision of dura, when indicated, or when doubt as to its necessity exists, extraction of the bullet whenever possible, for the reason that it is usually septic, and even when this is not so Dr. Phelps regards it as likely to produce dural or cerebral irritation in the future. The treatment is concluded by a discussion of the methods and limitations and the details of the various procedures recommended. The book concludes with the condensed histories of 300 intracranial traumatisms selected from 500 original cases.

The type and general dress of the work and the admirable illustrations are in accord with the scientific excellence of the work. It should be in the hands of every surgeon and medico-legal expert. J. P.

A TEXT-BOOK OF THE DISEASES OF WOMEN. By HENRY J. GARRIGUES, A. M., M. D., Professor of Gynecology in the New York School of Clinical Medicine; Gynecologist to St. Mark's Hospital in New York City, etc. Octavo, pp. 728. Containing 335 engravings and colored plates. Second edition, thoroughly revised. Philadelphia: W. B. Saunders, 925 Walnut street. 1897.

When the first edition of this excellent treatise appeared we ventured an opinion in the columns of the JOURNAL, (Volume XXXIII., page 755, July, 1894,) the sum of which may be considered as a favorable critique of the book. We wish to reiterate our then expressed judgment, which applies with even more forcefulness to the edition before us.

Garrigues is a teacher of experience and a disciplined practitioner of excellent judgment. He has written this book with the end in view of reaching a very large audience, composed (*a*) of those physicians without previous hospital training who learn gynecology in a single post-graduate course; (*b*) those who desire to attend such an institution but think they cannot leave their patients to do so; (*c*) general practitioners of medicine in country places who frequently acquire fame as gynecologists; and (*d*) undergraduates. As these four classes make up a considerable proportion of the profession of medicine, existent and prospective, it follows that this work must necessarily reach a large audience if all anticipations are realised. The fact that a new edition is so promptly called for is a flattering indication of the reception given the author's first effort.

The work is now divided into three parts: first, a general division in which anatomy, physiology, etiology, examination, treatment and the like are discussed; and second, a special division in which diseases of the vulva, of the perineum, of the vagina, of the uterus, of the tubes, of the ovaries and of the pelvis are dealt with; and third, an appendix which takes up sterility, lack of orgasm and intestinal surgery. Garrigues is especially strong in reference to the development of the female genitals, their anatomy and physiology, and is clear, concise and instructive with reference to examination in general. One of his truisms on the latter subject in particularly striking. In speaking of Sims's position (p. 137) he says: "It is a position on the left side, but by no means is every left-side position Sims's position."

In this edition the author has paid more attention to aseptic surgery than in the former edition and in doing so has kept pace with advancements in that respect. He has modified some parts of the text and changed a number of the illustrations, eliminating those of minor importance or that have become antiquated. The

patterns of instruments, too, have been revised to a certain extent and new material has been incorporated in several places. Notably, the whole surgical treatment of uterine fibroid and cancer has been re-written and simplified. The author has not hesitated in many instances to express his own opinion on the comparative value of different methods of treatment: and he has added in an appendix a short description of some of the methods employed in intestinal surgery.

It would be claiming too much to assert that this treatise is absolutely perfect, but that it presents special claims to professional favor is true. Moreover, it is a work that no gynecologist can afford to decline and it is one of the best for the general practitioner.

INCOMPATIBILITIES IN PRESCRIPTIONS. For students in pharmacy and medicine and practising pharmacists and physicians. By EDSEL A. RUDDIMAN, Ph. M., M. D., Adjunct Professor of Pharmacy and Materia Medica in Vanderbilt University. Octavo. pp. 267. New York: John Wiley & Sons; London: Chapman & Hall, Limited. 1897.

This work affords an excellent guide to the physician in prescription writing. To remember all incompatibilities is impossible, but the book is so conveniently arranged that it is but a minute's work to turn to the drug whose behavior in the combination is in doubt and find its reaction with various antagonistic substances clearly stated. The second half of the book is of interest to the student of pharmacy rather than to the medical man. It contains the formulæ of upwards of 300 prescriptions containing incompatibilities, which the author advises the student to study and discover for himself. Following this list are notes explanatory of the errors in the foregoing prescriptions, with suggestions to the druggist as to how many of the undesirable reactions may be avoided. Students in pharmacy and medicine, and the practising pharmacist and physician will all agree as to the excellence of this volume. M. J. F.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authors of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XIII., Infectious Diseases. New York: William Wood & Co. 1898.

These volumes appear with a regularity and promptitude that is almost surprising when we reflect upon the difficulties that lie in the way of publishing an encyclopedic work like this. The authors are scattered over two continents, and delays in transmission of manuscript, revision of proof and other matters of detail are almost inevitable. Hence, it is commendable to observe such prompt issuance of books as in this instance.

The most interesting section in the present volume is, in our view, the first, written by Victor C. Vaughan, of Ann Arbor. It deals with ptomains, toxins and leucomains, a subject that no one is more familiar with than this author. He first takes up bacterial poisons, then ptomains, and finally reaches food poisoning, which is a subject of paramount importance to every practising physician. Of especial moment, in this relation, are milk and cheese poisoning. These two food products are of such common use that they are found in almost every household. Frequent harm arises from their misuse when containing poisonous elements, and this volume affords an opportunity for physicians to familiarise themselves with the essential facts relating thereto.

The other sections are: Infection and immunity, by Harold C. Ernst, of Boston; Water-borne diseases, by Ernest Hart and Solomon C. Smith, of London; The duration of the periods of incubation and infectiousness in acute specific diseases, by Dawson Williams, of London; Smallpox, by John William Moore, of Dublin; Vaccinna, by P. Brouarder, of Paris; Mumps, by Jules Comby, of Paris. An appropriate index closes this interesting and valuable volume.

A Manual of Medical Jurisprudence. By Alfred S. Taylor, M. D., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital, London. New American edition of 1897 from the twelfth English edition. Thoroughly revised by Clark Bell, Esq., of the New York Bar. In one octavo volume of 831 pages, with fifty-four engravings and eight full-page plates. Philadelphia and New York: Lea Brothers & Co., Publishers. 1897.

Taylor's Medical Jurisprudence has always been a favorite in America. This popularity has been well earned and is due to the careful selection of cases cited. The present edition is a revision of all the previous editions and includes much new material. We hoped to find some reference to the defense of crime by the entering of the plea of hypnotic influence. This subject has more than once been brought up in American courts and its legal status should be defined in all books on medical jurisprudence. In the trial of Gabrielle Bompart, in France, her attorney attempted to prove that she was an accomplice in the murder while under the hypnotic influence of her confederate. That this testimony was not admitted by the court is a fact of so much importance that we regret its omission or any reference to it. Another omission which we regret is any reference to the X-ray. It is important that its use in the courts up to date should be clearly stated. Aside from these two criticisms, we have nothing but praise to say of the work. Its treatment of all subjects is clear and satisfactory. Illustrations are used wherever it is necessary to make clear a certain point, as for instance in the chapter on animal and human red corpuscles. We bespeak for Taylor's Jurisprudence a continuance of the popular favor it has so long enjoyed and merited. J. W. P.

HAND-BOOK OF MATERIA MEDICA, PHARMACY AND THERAPEUTICS, including the physiological action of drugs, the special therapeutics of disease, official and practical pharmacy and minute directions for prescription writing. By SAMUEL O. L. POTTER, A. M., M. D., M. R. C. P., London, Professor of the Principles and Practice of Medicine and Clinical Medicine in the College of Physicians and Surgeons of San Francisco; Medical Superintendent of St. Mark's Hospital, etc. Sixth edition. Fully revised and greatly enlarged. Royal octavo, pp. xv.—900. Philadelphia: P Blakiston, Son & Co., 1012 Walnut street. 1897.

This treatise has long been a favorite with the medical profession, having already passed through five editions, the first of which appeared in 1886, a flattering tribute to the popularity of the author's work.

This edition is larger by one-eighth than the fifth, and so much of it has been re-written that it is almost a new book. The author asserts that forty-six new articles have been added and 170 have been re-written, while many hundred new sentences have been incorporated into the original text.

In this edition serum-therapy has been dealt with under the titles toxins, antitoxins and animal extracts. Another important subject that has received elaboration in this edition is the treatment of poisoning. Every physician should be well informed on this subject and should familiarise himself with its latest literature.

This treatise has enjoyed the confidence of many colleges that have adopted it as a text-book, and the author has industriously endeavored to make it keep pace with the progress that is making in this branch of medical science.

THERAPEUTICS, ITS PRINCIPLES AND PRACTICE. By H. C. WOOD, M.D., LL. D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania. A work on medical agencies, drugs and poisons, with especial reference to the relations between physiology and clinical medicine. Tenth edition, thoroughly revised. Octavo, pp. xxxi.—1033. Philadelphia: J. B. Lippincott Co. 1897.

This treatise has become so familiar to the medical world through the nine editions previously issued that little remains for the journalist to do, except to invite the attention of physicians and students to the fact that already a tenth edition is at hand. Wood's therapeutics has already been adopted as a text-book by most reputable American medical colleges; teachers and practitioners of medicine are familiar with its excellence and it is an established favorite with students. Justly so, too, for Wood was one of the first authors to treat of drugs in their relation to physiology; in other words, to establish a direct relationship between clinical and physiological medicine.

In this edition the author has made some changes in the text by placing new material in various articles throughout the work. A

few drugs of minor importance have been omitted, others new in character have been added, while the various animal drugs have been dealt with in considerable detail. Toxins and antitoxins also come in for their share. Dr. Wood is an entertaining writer, an accomplished and forceful teacher, and this present edition of his well-tried and estimable treatise brings it abreast of the therapeutics of the present.

TRANSACTIONS OF THE COLORADO STATE MEDICAL SOCIETY. Twenty-seventh Annual Convention. By-laws and list of members. Denver, June, 1897.

One of the most interesting features of the meeting of this society, as recorded in its proceedings, was its action in regard to the meeting of the American Medical Association to be held at Denver, June 7, 1898. The enthusiasm of the Denver physicians seemingly knew no bounds. They first proceeded to raise by subscription $2,000, pledged to the Rush monument fund by Dr. Graham, at Philadelphia, last year. This was promptly done, Dr. Graham himself subscribing $200 and several others $100 each. The next problem in finance was to raise a sufficient sum by subscription to defray the expenses of the American Medical Association, the two items being no small tax upon the physicians of Colorado.

The Colorado State Medical Society is an active, progressive and scientific body of physicians, all of which is indicated by the character of work done at its annual meeting and properly recorded in its yearly volume of transactions. The present one is no exception to the rule.

SYRINGOMYELIA. An Essay to which was Awarded the Alvarenga Prize of the College of Physicians of Philadelphia, for the Year 1895. By GUY HINSDALE, A. M., M. D., Fellow of the College of Physicians of Philadelphia, etc. Philadelphia: P. Blakiston Son & Co. 1897.

This monograph is a careful study of the subject as regards its etiology, pathology and symptomatology. The author has made his subject clear by good illustrations and diagrams. He presents two hitherto unpublished cases. The appended bibliography is very complete, there being 514 references to 388 authors.

J. W. P.

LIPPINCOTT'S POCKET MEDICAL DIRECTORY, including the pronunciation and definition of 20,000 of the principal terms used in medicine and the allied sciences, together with many elaborate tables. Edited by RYLAND W. GREENE, A. B., Editor of Lippincott's Medical Dictionary. Philadelphia and London: J. B. Lippincott & Co. 1897.

The claims of this pocket medical lexicon to professional favor are based, according to the claims of the editor made in the pre-

face, upon its fulness, accuracy and convenience; and again, that it is up to modern requirements. Most, if not all, of these claims are made good in the text. The vocabulary is extensive in range, the definitions are for the most part clear, though concise, and the pronunciation measurably accurate; but we think it quite superfluous to adhere to the old-fashioned and obsolete methods of spelling involved in the general use of diphthongs. The book is well printed on strong thin paper, finished in gilt and handsomely and strongly bound in flexible covers. It is one of the best books of its kind for students that we have seen.

THE CARE AND FEEDING OF CHILDREN. A catechism for the use of mothers and children's nurses. By L. EMMETT HOLT, M. D., Professor of Diseases of Children in the New York Polyclinic: Attending Physician to the Babies' Hospital and the Nursery and Child's Hospital, New York. Second edition, revised and enlarged. Duodecimo, pp. 104. New York: D. Appleton & Co. 1897.

This little volume in its first edition was a work of much value in the training of children's nurses. The thorough revision and enlargement which the author has given the present edition has much increased its usefulness. The physician will find it an excellent work to put into the hands of any mother, for it tells just enough and tells it so clearly that no one can fail to understand. The space devoted to infant feeding is much greater than in the first edition and the teaching is thoroughly up-to-date.

M. J. F.

BOOKS RECEIVED.

A Text-book on Surgery, general, operative and mechanical. By John A. Wyeth, M. D., Professor of Surgery in, and President of the Faculty of the New York Polyclinic Medical School and Hospital; late Surgeon to Mt. Sinai Hospital and Consulting Surgeon to St. Elizabeth's Hospital, etc., etc. Third edition, revised and enlarged. Royal 8vo, pp. x—997. New York: D. Appleton & Co. 1898.

The American Year-Book of Medicine and Surgery; being a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators. Collected and arranged with critical editorial comments by eminent American specialists and teachers. Under the general editorial charge of George M. Gould, M. D. One volume of nearly 1,200 pages, profusely illustrated with numerous wood-cuts in text, and thirty-three half-tone and colored plates. Prices: cloth, $6.50 net; half-morocco, $7.50 net. Philadelphia: W. B. Saunders. 1898.

A System of Practical Medicine. By American authors. Edited by Alfred Lee Loomis, M. D., late Professor of Pathology and Practical Medicine in the New York University, and William Gilman Thompson, M. D., Professor of Medicine in the New York University. To be completed in four imperial 8vo volumes, containing from 900 to 1,000

pages each, fully illustrated in colors and in black. Volume III.—Diseases of the Alimentary Canal, Peritoneum, Liver and Gall Bladder, Spleen, Pancreas and Thyroid Gland, Chronic Metal Poisoning, Alcoholism, Morphinism, Infectious Diseases Common to Man and Animals, Miscellaneous subjects. For sale by subscription. Per volume, cloth, $5.00; leather, $6.00; half morocco, $7.00. Philadelphia and New York: Lea Brothers & Co., Publishers. 1898.

Sexual Neurasthenia: Its Hygiene, Causes, Symptoms and Treatment, with a chapter on Diet for the Nervous. By George M. Beard, A. M., M. D., formerly Lecturer on Nervous Diseases in the University of the City of New York; Fellow of the New York Academy of Medicine, etc., etc. Edited, with notes and additions, by A. D. Rockwell, A. M., M. D., formerly Professor of Electro-Therapeutics in the New York Post-Graduate Medical School and Hospital, etc., etc. With formulas. Fifth edition. Octavo, pp. xii.—308. New York. E. B. Treat & Co. 1898.

Transactions of the Texas State Medical Association. Twenty-ninth Annual Session, held at Paris, Texas, April 27, 28, 29 and 30, 1897. H. A. West, M. D., Secretary, Galveston, Texas.

Transactions of the Medical Society of the State of North Carolina. Forty-fourth Annual Meeting held at Morehead City, N. C., June 8, 9 and 10, 1897. R. D. Jewett, M. D., Secretary, Wilmington, N. C.

Lexique-Formulaire des Nouveautés Médicales, par le professeur Paul Lefert, 1 vol. in-18 de 336 pages, cartonné, 3 fr. Librairie J. B. Baillière et fils, 19, rue Hautefeuille (près du boulevard Saint-Germain), à Paris.

Orthopedic Surgery. By James E. Moore, M. D., Professor of Orthopedia and of Clinical Surgery in the College of Medicine of the University of Minnesota; Fellow of the American Surgical Association; Member of the American Orthopedic Association; Surgeon to St. Barnabas Hospital, Minneapolis, etc. Octavo volume of 360 pages, illustrated with 177 half-tones, from photographs made specially for this work. Price, cloth, $2.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

The Diseases and Injuries of the Conjunctiva, especially the so-called Granulated Lids. By John H. Thompson, M. D., Professor of Ophthalmology and Otology, Kansas City Medical College, Kansas City, Mo. Illustrated. Kansas City, Mo.: Hudson-Kimberly Publishing Co. 1897.

Literary Notes.

The Lofoten Islands, and their principal product, is the title of a handsomely-printed and illustrated brochure issued by Messrs. Parke, Davis & Co., of Detroit. It gives the details of the capture of codfish and the manufacture of cod-liver oil, and is full of interesting information on the subject. It will be furnished by the publishers on publication.

THE *Monthly Cyclopedia of Practical Medicine* is the title of a magazine that is issued to replace the *Universal Medical Journal.* The new journal is a handsomely printed, double-columned, large octavo, and is edited by Dr. Charles E. Sajous, 2043 Walnut street, Philadelphia. In the introduction adequate reasons for the change are given and it is also announced that there will be important modifications made in the publication of the *Annual of the Universal Medical Sciences*, the first volume of which is to issue soon.

THE Clyde Line of New York and Florida steamships has issued a handsome little brochure, beautifully illustrated, setting forth the pleasures and healthfulness of a winter trip to the south. To examine it makes one long for the land of the palms, roses and oranges. Physicians should not only send their patients but go themselves. It is one of the most healthful, restful, delightful and economical vacations that a physician can take. Information cheerfully furnished by the JOURNAL.

Items.

ANNOUNCEMENT.—In the April issue of the JOURNAL the publication of the History of Medicine in the County of Erie will begin. This will be a succinct account of medical affairs in the county during the nineteenth century. It will deal with men of prominence in the early history of the county, with medical societies, medical colleges, hospitals, medical journals, medical officers in the civil war, women physicians, history of homeopathy, individual members of the profession and many other items of interest. It will be profusely illustrated and will be published as a serial occupying a year in its publication. It forms the medical chapter in Our County and Its People, written by William Warren Potter, M. D., and is republished in the JOURNAL by courtesy of the Boston History Company.

The volume begins in August. Subscribers remitting now will receive the JOURNAL free until that date. Subscription price, $2.00 a year in advance.

AN ARMY MEDICAL BOARD will be in session at Washington City, D. C., during the month of May for the examination of candidates for appointment to the medical corps of the United States army

to fill existing vacancies. Persons desiring to present themselves for examination by the board will make application to the Secretary of War before April 15, 1898, for the necessary invitation, giving the date and place of birth, the place and state of permanent residence, the fact of American citizenship, the name of the medical college from which they were graduated and a record of service in hospital, if any, from the authorities thereof. The application should be accompanied by certificates based on personal acquaintance, from at least two reputable persons, as to his citizenship, character and habits. The candidate must be between 22 and 29 years of age and a graduate from a regular medical college, as evidence of which his diploma must be submitted to the board. Successful candidates at the coming examination will be given a course of instruction at the next session of the Army Medical School, beginning in November, 1898.

Further information regarding the examinations may be obtained by addressing the Surgeon-General, U. S. Army, Washington, D. C.

The Medical Excursion in June to Denver and Salt Lake City.—The American Medical Association meets at Denver, June 7th to 10th. One of the features of the gathering will be an excursion from Denver to Salt Lake City and return via the D. & R. G., Colorado Midland and Rio Grande Western railways, through the "heart of the Rockies," furnishing a splendid opportunity to view the most magnificent scenery on the American continent. Salt Lake City is an ideal summer resort and the bathing at Saltair in the Great Salt Lake—inland salt sea nearly a mile above sea level—is superb in June. There are more attractions in and about Salt Lake City than any place in the world. Later notice will appear in the Journal giving rates for this excursion and all details. In the meantime send to F. A. Wadleigh, G. P. A., Rio Grande Western Railway, Salt Lake City, for copy of pamphlets on Salt Lake City and the Rocky Mountains.

Orthoform should be obtained by the physician from his pharmacist for about $2.00 per oz. Should any practitioner who desires to employ the remedy be unable to readily obtain it in his vicinity, Victor Koechl & Co., 79 Murray St., New York, will be glad to fill his order direct upon receipt of the above mentioned amount. As yet only Orthoform (the base) is obtainable.

The Medical Society of the County of Erie, at its last meeting, authorised the board of censors to employ legal assistance in enforcing the laws against illegal practice of medicine. We understand the board has engaged the services of Tracy C. Becker, Esq., and Mr. Marc W. Comstock—the first named as counsel and the latter as attorney.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

A CENTURY OF MEDICAL HISTORY IN THE COUNTY OF ERIE—1800-1900.[1]

BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

Pioneer Physicians—Medical Societies—Medical Colleges—Hospitals—Medical Journals—Medical Officers of the Civil War—Women Physicians—History of Homeopathy—Individual Members of the Profession.

INTRODUCTION.

THE importance of preserving accurate history of all kinds in an accessible form constantly increases as years advance. This observation has no more forceful application than to the medical men and medical institutions of the county of Erie. As our county grows older and busier, with its rapidly increasing population and business development, the early landmarks are getting swept away and soon it will be difficult or impossible to trace medical events with accuracy unless they are recorded from time to time with precision and detail.

Several attempts heretofore have been made to preserve such a history, fragments of which are to be found scattered here and there through volumes, magazines and library papers. In arranging this record these have all been carefully searched, many of which have aided materially in its preparation. The purpose of this work is to bring the record forward to meet the conditions of the present period, giving data that have been verified and material that would seem of sufficient importance to justify its publication.

1. From "Our County and its People." Republished as a serial in this magazine by permission of the Boston History Company.

Moreover, as the century is drawing near its close the time would seem opportune to present in compact form, convenient for reference, a record of the principal events with which the medical profession in Erie county has been identified during the last hundred years. A grouping of these dates and divisions according to county boundary surveys appears necessary in order to reach the genesis of Erie county through hereditary lines.

While, therefore, the medical history of Erie county proper really begins when its present territorial lines were erected—namely, April 2, 1821, yet there is a valuable chapter that must be recorded relating to medical men of the period during which it was included within the boundaries of Niagara county.

THE PIONEER PHYSICIANS.

Cyrenius Chapin.—Though there is very little medical history in this region prior to 1800 that can be grouped or made available, yet with the birth of the XIX. century, or while it was yet in its swaddling clothes, there came hither a man who has left the stamp of his forceful character impressed upon the events of that period so strongly that neither time nor tide nor any other thing can efface it. It is with the advent of this man that the medical history proper of this region may be said to have commenced.

Cyrenius Chapin was born at Barnardstown, Mass., February 7, 1769. There is very little known of his early life, but he studied for his profession with his eldest brother, Dr. Caleb Chapin, at his birthplace. He completed his studies in 1793 and soon afterward married Sylvia Burnham, also of Barnardstown. He practised medicine several years at Windhall, Vt., then removed to Sangerfield, Oneida county, N. Y., and came to Buffalo in 1801, a place which had then begun to attract immigration. It was called New Amsterdam when laid out in 1801 by the Holland Land Company, but the name was changed to Buffalo in 1808.

The Holland Land Company had lately established its agency at Buffalo, but the village had not yet been surveyed and so a project that Dr. Chapin had partially negotiated with Joseph Ellicott, the company's agent, for the purchase of a township of land including the site of Buffalo fell through and he returned to Sangerfield. Finally, however, in 1803, Dr. Chapin returned to Buffalo, bringing his family with him, but he was obliged to locate temporarily at Fort Erie in Canada, as he was unable to obtain a suitable home in Buffalo.

Dr. Chapin soon acquired a large practice on both sides of Niagara river. On the Canadian side there was wealth, but on this the people were poor; hence his income was principally derived from Canada. He rode hundreds of miles in all directions seeking his patients on horseback, guided through the forest by blazed trees and other methods of convenience and safety then in vogue. He established the first drug store in Buffalo, often furnishing medicine as well as food gratuitously to his needy patients. In 1806, he secured the title to a tract of land at the corner of Main and Swan streets, running through to Pearl street, for the sum of $150, on which he established his home and removed his family hither from Fort Erie. Chapin Block, which appropriately bears the name of its original purchaser, now stands on a portion of this lot.

Between 1806 and 1812 Dr. Chapin was busily engaged in the practice of his profession and in helping to improve the now growing village of Buffalo. He was the foremost man of affairs in this region and commanded the respect even of the Indians, who looked up to him as the great medicine man. It is related that when he lost an only son the Indian chiefs sent delegates to express their sympathy and who formally attended the funeral.

When, in 1812, war was declared with Great Britain, Dr. Chapin made haste to offer his services to the United States government. He raised a company of volunteers and served in the capacity of captain, major, lieutenant-colonel and surgeon. This is not the place to record Dr. Chapin's military career, but one or two incidents of importance may be noted with propriety. On June 24, 1813, having now been commissioned lieutenant-colonel, he was sent on a reconnoissance by Colonel Boestler, U. S. Army. At a point a few miles west of Queenstown his entire command was captured and marched to Fort George, where they were retained under guard. On July 12th, having been ordered to Kingston, they embarked in two open boats, strongly guarded. When within a few miles of their destination the boats approached each other, Colonel Chapin gave a preconcerted signal, his men rose and overpowered the guards, the boats were turned about, and after a night of toil at the oars his British captives were delivered to the commandant at Fort Niagara as prisoners of war.

Another incident will serve to indicate the character of the man. On December 30, 1813, the village of Buffalo was burned by the British and Indians. Colonel Chapin defended a position

he had taken up at Black Rock until but five men of his command remained. He then retreated to Buffalo, where everything was in confusion. Mustering a few men and boys, he set about protecting the women and children, who had been left to care for themselves while their husbands and fathers were on duty at Black Rock. Colonel Chapin found a six-pounder cannon that he mounted upon wagon wheels and with it and his small force made a stand on Niagara street. He thus sought to delay the advance of the enemy until the women and children could escape, but after a few discharges of the gun its extemporised carriage broke down and the six-pounder became disabled.

Observing that further resistance was useless, Colonel Chapin tied a white handkerchief to his sword and rode out to make terms with the exultant, advancing foe. He agreed on his part to surrender all public property, arms and munitions of war. The enemy agreed to allow the women and children to remain unmolested and to protect as well as to respect private property. The British officer with whom the treaty was concluded violated the agreement almost immediately, permitting the Indians to burn the village. In the conflagration but two houses escaped destruction, which served as monuments to the perfidy of the British officer. Although Colonel Chapin failed to save the village, he gained for the inhabitants valuable time in which to escape and, unmindful of self, he surrendered himself a prisoner to protect his people from the vengeance of the British and Indians. He was taken to Montreal, where he was held a prisoner for nine months. Meanwhile, after the desolation of his home by fire, his family went to Canandaigua, where he visited them on his release. He then returned to Buffalo, where he was appointed surgeon to the military hospital. When relieved of this duty he located at Geneva, N. Y., but in 1818 he returned to Buffalo to reside permanently. He engaged in active professional practice, took a prominent place in medical societies and in public affairs and never lost interest in the welfare of the community. He died February 30, 1838, aged sixty-nine years, and was buried in the village cemetery with military honors.

Daniel Chapin.—Daniel Chapin came to this vicinity, from East Bloomfield, N. Y., in 1807. He established himself on a farm a few miles distant from the village of Buffalo, which property was afterward owned by Elam R. Jewett, on North Main street. Dr. Daniel Chapin resided in a log house, which was located in the

rear of the present homestead. This latter was built by his son, Colonel William W. Chapin, and is now occupied by Mrs. Elam R. Jewett. Daniel Chapin, like his namesake, Cyrenius Chapin, was a man of strong character and left the stamp of its forcefulness on his environment. He was a graduate of Yale college, a man of cultivation and a physician of great skilfulness, who commanded the respect of his neighbors and colleagues. Between Drs. Daniel and Cyrenius Chapin, however, there prevailed a wordy but harmless rivalry, amusing to others, but not of serious consequence. Both were strong men : strong in their preferences, strong in their hatreds, but both contributed materially to the establishment of medical practice on a sounder and more scientific basis, details of which will be recorded later.

Daniel Chapin was accustomed to visit his patients on foot, with dog and gun, even traveling as far as Niagara Falls in this way, going one day and returning the next. He died in 1821, aged about sixty years. His death was at least partly induced by exposure in the practice of his profession, the hardships of those days being often extreme and perilous.

Ebenezer Johnson.—In 1809 another physician of prominence appeared in Buffalo, who has left a name deeply interwoven with its early history. Ebenezer Johnson came here from Cherry Valley, N. Y., established himself as a practising physician and soon took a prominent place in the affairs of the little frontier village. To these three men—the two Drs. Chapin and Dr. Johnson—Buffalo will ever remain indebted for the parts they performed in those early days. These pioneer physicians were more than ordinary men. They were not only able physicians who were beloved by their patients, but they were also men who contributed largely toward laying the foundation of successful business enterprises that now make the city so famous.

Dr. Johnson established a drug store in connection with his medical practice, as Cyrenius Chapin had done before him—a fashion not uncommon in those days. Dr. Johnson was also, for a time, associated in business with Judge Wilkeson and afterward he established a bank. He accumulated a fine property and was elected the first mayor, when in 1832 Buffalo became a city, and three years later was again chosen to the same office. In 1815, and again in 1828, he was elected surrogate of Erie county. He lived in a handsome house on Delaware avenue, now a part of the Female Academy. In the financial revolution of 1837 he met

reverses, losing a large part of his property. He went to Tennessee with his brother to look after their interests in an iron mine. He died at Tellico Plains, Tenn., February 8, 1849, aged sixty-three years.

Josiah Trowbridge.—In the spring of 1811 the medical contingent of this new region received a strong reinforcement in the person of Dr. Josiah Trowbridge, who came on horseback from Vermont, with a lawyer friend by the name of Walker. Following the example of Dr. Cyrenius Chapin, and for a similar reason—namely, lack of suitable living accommodations at Buffalo, Dr. Trowbridge took up his abode at Fort Erie.

The declaration of war the following year caused him to return to the United States, but his heart was in the queen's dominions, as he had formed an attachment for one of Her Majesty's subjects. On the 19th of September, 1814, he crossed the Niagara river, captured Margaret Wintermute, and was married in Buffalo on the 22d of the same month. Dr. Trowbridge gave the government hearty support during the war of 1812, though he was not a sympathiser with the war party. He became a member of a volunteer artillery company, in the ranks of which he served. He was fond of his gun, and one day when shooting ducks on Strawberry Island in company with an officer, Lieutenant Dudley, of Perry's fleet, together with some other friends, he and his companions were surprised and captured by the British. He was taken to Fort George, where the Indians threatened him with bodily harm, but the officers and chiefs interfered, thus preventing a prospective massacre. After a few days' detention Dr. Trowbridge and his companions were released, whereupon they returned to Buffalo after a tedious journey on foot. Dr. Trowbridge continued in active practice until 1836, having accumulated a handsome property. This he lost in 1837 when financial reverses came to all. He was elected mayor of Buffalo this same year. He did a large consultation practice until 1856, when failing health compelled him to relinquish it. He died September 18, 1862, aged seventy-seven years.

John E. Marshall.—The next medical man of prominence to locate at Buffalo was Dr. John E. Marshall. He came in 1815; but he had practised previously at Mayville, N. Y., and was the first clerk of the county of Chautauqua (1811), having been appointed by Gov. Daniel D. Tompkins. Dr. Marshall was born at Norwich, Conn., March 18, 1785, and was licensed to practise medicine August 3, 1808, by the Connecticut state medical society.

He practised for six years at Mayville, that is, from October, 1809, to March, 1815, and married, September, 1810, Ruth, daughter of Orasmus Holmes, one of the early pioneers of Chautauqua county. Dr. Marshall was appointed surgeon of the Second Regiment New York State Militia by Col. McMahon, April 15, 1812, and joined the regiment at Buffalo about December 30, 1813. He served for five months on the frontier, when his regiment was disbanded and he returned home. On August 1, 1814, he was again ordered to report for duty. There were many sick during August and September of that year and in their care Dr. Marshall, who was senior medical officer on hospital duty, himself fell sick and was obliged to return to his home. It is believed that for many years he continued to suffer from this camp sickness. He resumed his duties late in the fall, soon after which his regiment was discharged. After his removal to Buffalo, in March, 1815, he began to acquire fame as a medical practitioner and he was equally respected as a citizen.

He was appointed clerk of Niagara county (then embracing the present county of Erie) in 1818, and in 1832 he was health physician of Buffalo. He was treasurer of the county medical society in 1826, 1827 and 1828 and was president in 1830. He died December 27, 1838, of pneumonia after a brief illness.

These five stalwart physicians—the two Drs. Chapin, Johnson, Trowbridge and Marshall,—constituted a phalanx that served as a basis for the future medical history of Buffalo and Erie county. The history of this epoch is not one of medical organisations, institutions, societies, hospitals or colleges, but rather a history of the individuals who composed the medical profession of the period and the locality. It is for this reason that the history of medicine here up to 1821 is necessarily a grouping of biographical sketches.

The Medical Society of the County of Erie.

In November, 1805, a movement was begun in Saratoga county looking toward the organisation of the medical profession into a fixed and definite body, for the purpose of improving its status and to resuscitate it from the obscurity and ill-repute that ignorance was fast consigning it. A meeting was held during which committees were appointed and a resolution passed inviting the coöperation of the neighboring counties of Montgomery and Washington. An adjournment was had until January, 1806, at Balston, at which time a memorial to the legislature was adopted

and a committee consisting of Drs. Fitch, of Washington, Stearns, of Saratoga, and Sheldon, of Montgomery, was appointed to present it. Two of the committee, Dr. Stearns and Dr. Sheldon, attended the next session of the legislature as members, when, fortunately, Dr. Sheldon was chosen speaker.

Though the committee referred to was charged with representing only the three counties named, it assumed the responsibility of extending the privileges of the proposed medical practice act over the entire state so that all the counties might be included in its provisions. The memorial was presented to the assembly in February, 1806, and referred to a committee consisting of the following-named members : William Livingston and Isaac Sargeant, of Washington, Gordon Huntley, of Otsego, John Ely, of Greene, and Joel Frost, of Westchester. It so happened that the majority of the committee were physicians and after considering the bill, which now contemplated a general law applicable to the entire state, reported it favorably to the house. Here it was destined to encounter bitter opposition, for then, as now, there were plenty of men to array themselves against the advance of medical education. But, supported by the speaker, the committee and other members of powerful influence, the bill finally passed, though even at last it might have failed had not, at a critical juncture, William P. Van Ness, a forceful speaker and a skilful parliamentarian, lent the aid of his powerful influence in a speech noted for its eloquence and argumentative weight. The bill became a law on April 4, 1806, and on the first Tuesday of July, three months afterward, about twenty county societies were organised. Within the next two years nearly every county in the state had its medical society.

Under the provisions of this law the medical society of the state of New York was organised on the first Tuesday of February, 1807, which consisted of one delegate from each county society. Among the provisions of the statute was a section giving the societies control of the licensing of physicians after due examination, which was among the first efforts in the country to give to the medical profession an honorable and legal standing in community.

The control of examining and licensing was subsequently lost to the state, and we shall see presently how important a part the medical society of the county of Erie played in bringing about its restoration.

Although the state medical society was organised in 1807, as we have seen, it was not until 1817 that Niagara county, of which Erie then formed a part, was represented in it by accredited delegate. Dr. James H. Richardson was the first delegate from Niagara county. He attended, presented his certificate of delegation and took his seat in 1817. It does not appear that Dr. Richardson attended more than one session of the state society.

Erie county, as we have previously remarked, was a part of Niagara county from 1808 to 1821 when the division was made. In Niagara county attempts were made to organise a medical society as early as 1808 or 1809, but owing to differences of opinion among physicians, the unsettled state of society in general, the approaching difficulties with Great Britain and finally the war of 1812, no definite organisation was effected until 1816. The first delegate from the medical society of Niagara county to the medical society of the state of New York was Dr. James H. Richardson, as we have seen, who was sent on that duty in 1817.

After the county of Erie was set off in 1821 its medical society became entitled to a seat on its own account and Dr. Lucius H. Allen was appointed delegate. He appeared and took his seat in February, 1823. There is no record to show that he ever attended another meeting. Indeed, Erie county was not represented again in the state society until 1833, when Dr. Bryant Burwell was seated as delegate.

The medical society of the county of Erie was organised January 9, 1821, at the house of P. M. Pomeroy, in the village of Buffalo. There were twenty-four charter members, whose names were as follows : Daniel Allen, of Hamburg, Lucius H. Allen, of Buffalo, Cyrenius Chapin, of Buffalo, Thomas B. Clark, of Buffalo, Sylvester Clark, of Buffalo, Benjamin C. Congdon, of Buffalo, Jonathan Hoyt, of Aurora, Jonathan Hurlburt, of Buffalo, Daniel Ingalls, of Springville, Ebenezer Johnson, of Buffalo, William Lucas, of Buffalo, Charles McLowth, of Buffalo, John E. Marshall, of Buffalo, William H. Pratt, of Eden, Charles Pringle, of Hamburg, Elisha Smith, of Buffalo, Rufus Smith, of Aurora, Sylvanus S. Stuart, of Buffalo, Ira G. Watson, of South Wales, John Watson, of Aurora, James Woodward and Josiah Trowbridge, of Buffalo.

The following-named were elected officers : President, Cyrenius Chapin ; vice-president, Daniel Chapin ; secretary, John E. Marshall ; treasurer, Lucius H. Allen ; censors, Charles Pringle,

Sylvanus S. Stuart, Benjamin C. Congdon, Lucius H. Allen and John E. Marshall.

Many of these physicians had lived in Western New York for years before Erie county was set apart and had been members, as well as in some instances officers, of the medical society of the county of Niagara.

At the first meeting of the medical society of the county of Erie the president, Dr. Cyrenius Chapin, delivered an address in which, among other things, he inveighed against quacks, who, he said, did no end of harm, and he also deplored the inconsistency and cold ingratitude of the public toward the medical profession ; and further, he affirmed, "the truth is too obvious to require illustration that our profession is far from maintaining the rank among the learned professions which its consequence demands." In the course of his address he called attention to the fact that the services of physicians were undervalued by the public, and he suggested that as they were not charitable institutions it was time to resolutely determine upon a total reformation.

In a public notice which he issued about this period Dr. Chapin stated that he felt it his duty to inform those indebted to him for professional services that the time had arrived when imperious necessity compelled him to make an immediate collection of his accounts. We quote from this notice as follows :

> It has too long been a prevalent idea with the public that the physician's bill is never to be paid and to call upon a patient, when restored to health and to the enjoyment of life by the skill and attention of his physician, for a reward for the services rendered is considered almost an insult and a hardship. . . . To relieve my own necessity I am compelled to resort to an immediate collection and this I shall do without discrimination. Those, therefore, who think it a duty to save the cost of prosecution will find it expedient to bestow immediate attention to this subject.

The question of finance was an important one to the society. Dr. Lucius H. Allen was its first treasurer, but he does not appear to have left a record of his service. The first treasurer's record obtainable is dated January 9, 1827, at which time Dr. John E. Marshall was treasurer. This report shows that the receipts for the previous year were $11 and the disbursements $8. In 1830 the treasury contained six shillings, while the debts amounted to $10.50. In struggling to maintain a cohesion of membership the society sought to enforce the attendance of its members. No per-

son was legally entitled to practise medicine or surgery in Erie county, except he was a member of the society. It, therefore, became compulsory on him to join and if otherwise qualified the society had no right to refuse him admission. Likewise, there was no legal way to get out of the society, hence it was empowered by law to exercise all sorts of discipline. Among other rules, it imposed a penalty of $1 for absence at any meeting and some amusing incidents arose out of the endeavor of the treasurers to collect this fine.

At one of the sessions the following was adopted : "*Resolved*, That the treasurer be directed to collect outstanding dues from members—peaceably if he can, forcibly if he must." In response to his demands a large number of letters were received which indicated the unpopularity of the proceedings. One of these is deemed of sufficient interest for a synopsis of it to find a place in these pages. It was written by Dr. Bela H. Colegrove, of Sardinia, to Dr. Marshall, under date of June 11, 1838. In it Dr. Colegrove protests against being fined for nonattendance, because the rule is unjust and discriminates against members. He lived thirty miles from the place where the meetings are required by law to be held and to go there twice a year meant a sacrifice to him of some $15 or $20, or to pay a penalty which the city members could avoid by the sacrifice of so many pence. He did not think he ought to compromise the interest of the community where he resided from neglect caused by attending the meetings. He did not complain of the amount, but of the principle, and he would as soon and with equal justice make the penalty for nonattendance imprisonment in the county jail for a term of six months as to have it as it now is.

[*To be continued.*]

GENITO-URINARY EPITHELIUM.[1]

By THOMAS B. CARPENTER, M. D., Buffalo, N. Y.

THE later text-books upon urinalysis and diseases of the urinary tract lay far too little stress upon the importance of recognising and determining the exact source of epithelial cells found in the urine. Many observers claim that no reliable inferences can be drawn from cellular elements appearing in the urine,

1. Read at the seventy-sixth annual meeting of the Medical Society of the County of Erie.

either as to the source of the cells or the existence of an abnormal condition, provided the source could be determined. The following lines, quoted from Professor Purdy's recent edition of Practical urinalysis and urinary diagnosis, presents very briefly some opposing views:

> It was formerly believed that the various divisions of the urinary tract possessed their own special form of epithelium and, therefore, the special forms of epithelial cells found in the urine became valuable aids in locating the seat of lesions of the urinary tract. This view is, indeed, still held by a number of prominent observers. More accurate and extensive observations, however, have shown that this can only be depended upon in a very general way. Very often the epithelium claimed to be characteristic of certain divisions of the urinary tract has been found in all its typical peculiarities in a totally different location. This, however, is more likely to be the case in divisions more nearly located to each other. The divergent views upon this point, held even by the ablest and most experienced observers, may be illustrated by the following: Sir William Roberts describes the epithelium shed from the kidney pelvis as that of "very irregular, three-cornered, elongated, rudely circular, etc." Dr. Dickinson has carefully figured the epithelium taken from the bladder and in reply laconically observes: "It will be seen that these varieties of, even to the *et ceteræ*, are equally characteristic of vesical disease."

Dr. Dickinson's reply to Sir William Roberts makes no observation upon variations in size between the cells from the kidney pelvis and the bladder, neither has the exact source of the cells been noted. Variations in size and shape exist, not only between the cells of different parts, but between the cells of the same part depending on the condition at that place, the existence or non-existence of inflammation, and whether the cells are superficial or deeply seated in the lining membrane. Sufficient variations in size and shape can be found to accurately determine the previous location of cells as they occur in the urine. Many times it is difficult or even impossible to definitely locate a lesion from the clinical symptoms in a certain case, and in these cases the information gleaned from a careful observation of the urine, and particularly the cells occurring in it, is of inestimable value. In most cases a more accurate diagnosis of the exact seat and extent of a lesion can be made by this means than from the symptomatology. The cells as they appear *in situ* will be considered first, after which their appearance in the urine.

Beginning at Bowman's capsule, we find, as a rule, the tubular portion of the kidney lined with a single layer of cells. Some observers (Klein) note the finding of an additional layer of cells intimately attached to the membrana propria of the larger collecting tubules. In Bowman's capsule the lining consists of polyhedral, columnar cells, changing to squamous in the adult. Passing through the neck of the capsule to the proximal convoluted tubule, the cells are polyhedral or short columnar and may be angular or club-shaped. It is of interest to note that in some of the lower animals ciliated cells have been found in this situation, but so far as I know nothing of this character has been noted in man. The cells of the proximal convoluted tubule are peculiar in that the nucleus is situated eccentrically in a mass of granular protoplasm, and the remainder of the cell, that part attached to the membrana propria, has a fibrillated appearance, the fibrils running at right angles to the tubular wall. This peculiar structure is common to a greater or lesser degree of all portions of the tubular structure down to the collecting tubules, but most marked in those portions situated in the labyrinth. This peculiarity of structure is supposed to have to do with the separation of the saline constituents of the blood.

Passing downward to the spiral tubule the cells possess practically the same characteristics, but granulation and fibrillation are less marked. Continuing into the descending loop-tube of Henle the cells change to a marked degree. No evidence of fibrillation is apparent, they lose the columnar shape, becoming squamous, less granular, very transparent and possess an oval nucleus. After passing Henle's loop the cells change again to the polyhedral variety, are larger in size than those from the proximal convoluted tubule and show slight indication of fibrillation. In the irregular tubule, between the ascending tube of Henle and the distal convoluted tubule, the cells are polyhedral, pyramidal or short columnar and possess a flat, oval nucleus. The fibrillated appearance is at this point very coarse and well marked. In the first part of the collecting tubule the cells are flat, polyhedral and quite transparent. As we go lower down in the collecting tubule the cells tend toward a battledore shape and are considerably larger than in any portion yet considered. This observation is at variance with some investigators, but certainly true, as careful study of the cells will show.

Descending to the pelvis of kidney, decided changes are noticeable. Instead of a single layer of cells, we find the lining to con-

sist of several layers,—so-called stratified trasitional epithelium,—meaning, of course, that there are two or more layers of cells, developing from the bottom upward and undergoing transitions in shape as the surface is reached. In the lower layers of the renal pelvis the cells are approximately round, about twice the size of a pus corpuscle and usually refractive in appearance, with a well-marked nucleus. As the surface is reached the cells assume a battledore shape characteristic of this locality. This stratified transitional epithelium is common to the remainder of the urinary tract with few exceptions, to be noted later.

According to Klein, "the epithelium of the ureters and bladder is transitional epithelium. It is stratified, the most superficial layer consisting of squamous cells; underneath this a layer of club-shaped cells, between which extend one or more layers of small spindle-shaped cells." I cannot substantiate this statement as a whole, for in my observations the superficial layer of cells consists of the spindle-shape and are comparatively large. The quotation is true for the bladder, but such a great variation in size exists that distinction is easy.

Passing now to the neck of bladder and the prostatic urethra, we find the same transitional, stratified epithelium, but differing greatly in size from that of other locations. The superficial cells of this region are of the circular, squamous variety and are much more refractive than cells from any other region. Along the remainder of the urethra the cells are of the simple, columnar variety, until the fossa navicularis is reached, where again we find cells that are very similar to the prostatic. In this connection it is well to note that after chronic urethral inflammations the columnar cells are replaced by pavement cells (Finger).

In the female urethra stratified, transitional epithelium is also found, except at the orificium externum, where the cells are of the stratified, pavement type, without transitional forms. The superficial layers of the female urethra have been usually described as club-shaped. This I have not noted, always finding them round or polygonal and approximating the male prostatic cells in appearance. In the vagina about the same character of cell is found as in the bladder, differing in the usual larger size of the superficial vaginal cell, also in the fact that the vaginal cells overlap each other when in small shreds, instead of simple contact and cementation, as in the bladder.

It is exceptional for any large amount of epithelium to be

thrown off and voided in the urine at one time; it only occurs in the most acute inflammations. Chronic inflammations will in time entirely denude a surface, but regeneration is rapid and it is in extreme cases only that sufficient information cannot be obtained from the epithelium present. Unfortunately, epithelial cells are elastic and change their shape as the part to which attached and after detachment the action of the saline urine still further changes them. Polyhedral and columnar cells are apt to become globular; small, squamous cells will also swell and appear quite different than when observed *in situ*. These points, as well as the condition of the surface from which the cells may come, must be considered. In shock, following severe injuries, with resulting internal congestions, all the cells of the urinary tract may become swollen and distorted. The character, extent and duration of an inflammation will also alter the appearance of the cells. Rapid regeneration will result in distorted forms and old inflammations with sluggish cell formation result in fatty degenerated cells, more or less distorted. Inflammations of an asthenic type produce characteristic transparent cells that will rapidly disintegrate.

Let us now consider from a practical standpoint the epithelial cells as they occur in the urine and note briefly how they may vary from the descriptions already given. The cells from the renal tubules are always round, except those coming from the larger collecting tubules. These cells usually have a process jutting forth from some portion of the periphery and thus tend toward the battledore shape. Variations in size can be noted, depending upon the portion of the kidney from which they come. Those cells from the smaller tubules are usually somewhat smaller than a pus corpuscle and gradations in size are seen, up to those half as large again as a pus corpuscle and coming from the larger tubules. The only cells that approximate the renal in appearance are those from the urethra and its accessory glands. Differentiation is easy because the cells from both places always have characteristic accompaniments: the renal cells by casts and the urethral cells by pus. The appearance of renal cells in normal urine is exceptional.

The superficial cells of the kidney pelvis are of the battledore shape and are seen typically in acute rapid processes where the cells are often shed in scales, the individual cells overlapping like the slates on a roof. In chronic processes the superficial cells may disappear entirely and only the slightly larger round cells of the

deeper layers be found in the sediment. Affections of the renal pelvis are of so much importance and difficult of diagnosis that a more extended description of the epithelial accompaniments will be given. As pointed out by Ultzman some years since, pus appears in the urine, both as free separated corpuscles and in the form of clumps, differing in size and appearance, depending upon the source. The shreds, so well known as occurring in gonorrheal urine, represent one form of pus clumping, due either to the rolling up of the secretion as the urine passes it through the urethral canal, or, in some cases, to the tenacious character of the secretion. The same physical condition presents itself in pus from the renal pelvis and due to the same causes. The pus is rolled into clumps as it passes through the ureters, but differing from the urethral and prostatic clumps by the tighter clumping and the smaller size of the clumps. In some instances the clumping is due to packing of corpuscles in the apices of the calices or in large collecting tubules. The purulent plugs or clumps are associated with the characteristic cells of the part from which they come.

Cells from the ureters are not often found in the urine because the ducts are usually not affected in the passage upward of an inflammation. After passage of a small renal calculus the cells may be found in abundance and are of the spindle or double caudate variety.

Cells from the superficial layer of the bladder are of the large squamous type and are found in quantity only in the acute inflammations. In chronic cystitis the cells are not numerous and oftentimes coming from the deeper layers may simulate in shape the cells from nearly all portions of the urinary tract. As a rule the bladder cells that might be mistaken for those from other localities are much larger and the character of accompaniments generally suffice for an accurate localisation. Approaching the neck of bladder, the cells become much smaller, more nearly circular and so refractive in appearance that mistake is not likely to occur. This peculiar refractive appearance is common to three portions of the urinary tract—namely, fossa navicularis, prostate (opposite internal and external sphincter muscles) and convoluted tubules where the tubule joins Bowman's capsule. It is also noticeable in the female urethra near the meatus.

Cells from the male urethra between the prostatic portion and the fossa navicularis are usually round, as appearing in the urine, and somewhat larger than a pus corpuscle. If the urine is fresh

and only a short time elapses between the time of voiding and examination, the more nearly the columnar shape is retained.

Cells from the vagina are often a confusing factor in the examination of female urines and are usually present in considerable numbers, even in normal samples. Their size and number, overlapping, if present in shreds, and the absence of pus usually suffices to localise.

325 JERSEY STREET.

THE ADIRONDACKS IN WINTER FOR TUBERCULAR PATIENTS.[1]

BY SARGENT F. SNOW, M. D., Syracuse, N. Y.

THE favorable discussion which followed a paper before this society in Syracuse two years ago, on Aural, nasal and laryngeal tuberculosis, with special reference to the Adirondacks as a winter health resort,—the results of later observation and the fact that, to date, no treatment devised for these affections of the respiratory tract acts so well as the climatic treatment,—encourages me to present this, as a supplement to the first, under the title The Adirondacks in winter for tubercular patients.

As a review of the above-mentioned article, I will quote from the conclusions therein: (See BUFFALO MEDICAL JOURNAL, December, 1895.)

1. That we have here at home, in the Adirondacks of our own state, localities where many tubercular patients may find the climatic and physical environment required.

2. That the patients do equally as well in fall and winter and gain more than in the summer months.

These conclusions were arrived at after a careful scrutiny of results to that time. To sum up later experiences and avoid too much detail, an abstract of a few cases will perhaps be most expedient.

Prominently, I would mention a young woman who came under my notice in October, 1895. Examination showed marked tubercular ulcerations along the inner side of the left arytenoid cartilage, together with some dulness and respiratory murmur in upper lobe of right lung. The general appearance of this patient was such as we often meet, being pale and careworn, with history of almost constant poor health and throat trouble for years. She

1. Read at the thirtieth annual meeting of the Medical Association of Central New York at Buffalo, October 19, 1897.

began her residence in the Adirondacks December, 1895, staying there until May 20th of the next year, when she returned home a most perfect picture of health, weighing 140 pounds, muscles hard, good color, no rise of temperature, laryngeal ulcerations removed, with only a slight thickening of the membranes in that region as a reminder of her former trouble.

This young woman, while in the woods, began a vigorous routine of life as soon as her temperature became normal, taking long tramps on snow shoes, and improving every opportunity to be out of doors. The gain of weight was about twenty pounds, which, together with the superb physical appearance, has remained permanent until the present writing. She resumed her position as bookkeeper, which she has filled without interruption.

This case, I believe, should be looked upon as exceptional and should not be taken as a safe instance for guidance, for, as a rule, it does not seem best for such patients to so soon resume their ordinary routine of life.

My practice being limited to ear, nose and throat affections, makes it true that most of the tubercular cases observed are in the first stage, but there have been exceptions, one of which I will mention. A well-known homeopathic physician of Syracuse called to see me July 2, 1896, complaining of irritable pharynx with distressing cough. Upon inquiry I found that one year previous he had had considerable pulmonary hemorrhage, but had been able to continue his work. For four months he had been losing weight, throat had been sore and much mucus had been expectorated. I soon became convinced that his local catarrhal manifestations were of little importance compared to the constitutional trouble. An examination of sputum was made, with report that it was loaded with tubercular bacilli and fibrous tissue. Physical examination of the lungs revealed an area of marked dulness with soft râles, which area before he left town was well broken up and a cavity forming.

I kept close watch of this patient, spending about two weeks as a near neighbor of his in the woods the following August, and was very much impressed with the gravity of the situation. The beneficial effects of his surroundings appeared to be almost overcome by the activity of the tubercular process. During the first three weeks, instead of gaining, he seemed to have lost ground, and when I met him was barely able to drag himself about. A more careful regulation of his mode of life, with

enforced rest, was followed by some improvement, though no decided change for the better was shown, all symptoms indicating a gradual and continuous destruction of lung tissue, but with the advent of cold weather he began to improve and was soon able to do a little practice in the community where he was staying. This improvement continued in a marked manner until the warmer months, when there was a tendency to drop back some, but his close and careful attention to diet, habits, etc., has kept him during the summer months of this year in a very good condition,—being able to carry on quite a large practice. I am assured by letter and other reliable sources that he feels and seems almost well, and very content to spend another winter in the same region,—a marked testimonial to the value of the climate in the colder months.

As a parallel to the above, a brief mention of two other cases might be made; one, a young man, who boarded at the same place with the doctor and who, when I first met him, appeared to be in about the same condition, but who before two weeks' stay in the woods was up, had clearly made more gain in strength and whose cough was much more diminished. This individual was like the doctor, in the second stage of pulmonary tuberculosis, but, I am informed, had continued to improve until his return home to Buffalo in October. The details of the succeeding development of the case I have been unable to learn, except that he spent the winter in Colorado, returned home in the spring and soon died.

The second parallel case, parallel because he came under my care and went to the woods about the same time as my medical friend, but who appeared as a much more favorable case, spent six weeks in the Adirondacks, returned home showing marked improvement, having gained twelve pounds in weight, normal temperature and an outward appearance of complete restoration of health.

Being convinced that it would not do to resume his old position in business, he started for Denver, where he stayed until early summer. To my disappointment and though he had been advised to go there by several eminent men, the climate did not agree with him and he came home again to this state much worse and well along in the second stage. It surely seems that either of these two cases would have fared better had they let well enough alone and spent the fall, winter and spring with the doctor in the Adirondacks.

Experience proves it to be dangerous for such patients to migrate

to a dryer or warmer climate, even during the breaking up of spring time, as advised by some, for the chances are that in their journey they will stop off for a visit at their old home and thereby renew the tubercular activity sufficient to more than overcome the benefit they would get from the change. A continuous residence until the disease is well under subjection is almost imperative.

The foregoing facts are submitted as the gist of an impartial observation of the great benefit given these patients by the Adirondack air in winter as well as in summer, and if the experience of the medical men of central and western New York be, or should become, along the same line, we can look into the future and see great changes. The state authorities will learn that those magnificent virgin forests have a value beyond that of fostering game and protecting the head waters of rivers—that of helping to make complete a divine gift to humanity—an all-the-year-round sanitarium for consumptives.

We can perhaps look again and further into the future and see the hospitals of adjacent cities relieved of their depressing and germ-producing tubercular cases, because of auxiliary hospitals or sanitariums, under charitable or municipal control, located at some convenient spot within the woods. If we look again, we may see these same auxiliaries endowed and enlarged by some of our philanthropic capitalists, the dreaded disease robbed of virulence and cheated of many victims. Such philanthropy is well illustrated in the recent development of the Loomis Sanitarium, at Liberty, Sullivan county, N. Y.

Pardon this entrance into the realm of prophesy. The present commands our attention. If the medical profession looks upon the propositions set forth in this paper as true, the future will take care of itself.

Eminent authorities have long recognised the value of the mountainous regions of New York state as a summer resort for tubercular patients, and those who have tried them as a winter sanitarium will, we believe, fully agree, when I assert that they are 25 per cent. more valuable in the colder months.

No fear need be entertained because of the rigorous climate, for the invigorating effects appear to compensate. If we expect permanent results, only those in the first or early part of second stage should be sent and even the best of these may not be able to again live in a moisture-laden atmosphere.

204 East Jefferson Street.

DISCUSSION.

Dr. MOONEY, of Syracuse: I would like to add the history of one case similar to these reported. One afternoon a married woman, thirty years old, came from northern Michigan to her former home, Syracuse, suffering with incipient phthisis and the sputum showing plenty of bacilli. She was sent to the Adirondacks at my suggestion and remained there until the 1st of May. She weighed ninety-four pounds when she went there and on her return the 1st of May weighed 116, the most she had ever weighed in her life, and microscopic examination of the sputum showed the absence of bacilli. She has remained home ever since pursuing her usual occupation of housework, apparently in perfect health.

Dr. ROCHESTER, of Buffalo: I have been in the habit of sending cases to the Adirondacks for the last ten years and I must say that I shall continue to send them there in increasing numbers; and not merely those in the first stage, or even the beginning of the second stage, although, of course, those cases are the ones that get well; I think that even advanced cases of tuberculosis are benefited by a stay in the Adirondacks for as long a period as they can afford to be there. Those advanced cases are, of course, not sent there with the chance of recovering. I have three cases in mind at present that were sent some time ago who have recovered entirely, one of whom has gone west to live and one of whom has returned to Buffalo to live and remains without evidences of the disease. I have this year sent five cases to the Adirondacks and all of them are improving very materially. The two particularly that were in the first stage, early in the first stage, were in the incipiency, have right straight through the summer and this fall constantly gained in weight and improved in every respect; the fever has left them entirely; the physical signs have almost disappeared. One case I returned here for a week a short time ago and one case has returned not benefited, who was an advanced case. There is one thing, however, about the Adirondacks that I think is important for us to bear in mind and a warning that we must give our patients when we send them there—that is, the importance of staying there.

One of the advantages of the Adirondacks is that it is near and our patients can go there without very great expense. It is also one of its greatest disadvantages that it is near, because they can come home and they think they can run down for a little excursion, a little stay of a week or ten days, or something of that sort. That is where the bad results come in. If they could go there and stay and we could insist upon their staying until they were discharged by the physician in charge in the Adirondacks, the final results would be much better than if they went there and came back when they felt well, for so many of

them como back feeling well before they are well, that in the course of six months or so they are worse off than when they first went. One other thing further I would like to speak about is the manner of making our diagnoses of tuberculosis before the tubercle bacilli appear in the sputum. I think we ought to do that and that is a point upon which we as scientific observers of the present day are getting a little bit below our fathers iu acuteness of observation. Tuberculosis ought to be diagnosticated before the process in the lung has proceeded so far that the bacilli appear in the sputum, and it strikes me that careful study of cases in all their aspects, of not merely physical signs, but the symptoms leading up to, and taking into consideration very careful exploration of the chest, should enable us to make our diagnosis of tuberculosis before the tubercle bacilli appear in the sputum.

Dr. Ely, of Rochester : I listened with great interest to this paper and the remarks of Dr. Rochester and others. I can only add this to what has been said : that I have been able to make diagnoses in some cases by the microscope before the physical signs were clearly apparent and I think that consumption is more curable today than it ever has been before, because of the capacity for its early appreciation and the recognition that climatic change is the essential thing. I am sure that cases can be diagnosticated before tubercle bacilli appear in the sputum, but I question, sir, whether there are not some cases which can be diagnosticated by the microscope when the physical signs upon the examination of the chest would leave the physician in doubt.

Dr. Elsner, of Syracuse : The paper is full of interest and it strikes me that the discussion which it is bringing out is equally interesting and equally important. One of the greatest problems which we have to solve today is the early recognition of pulmonary tuberculosis and I am very happy to hear these two gentlemen who have just spoken speak of the recognition of this disease early, because therein lies the safety of all of these patients. It is important in these cases to recognise the disease before the breaking down of tuberculous infiltrates which set loose these tubercle bacilli. It is important for us to recognise miliary tuberculosis in its incipiency and the most grave forms of miliary tuberculosis, you all know, do not for a long time give the tubercle bacillus in the sputum. For that reason I think that everything which tends towards the diagnosis of incipient phthisis is of the greatest importance and if we occasionally make a mistake and diagnose a condition as being tuberculous which is not tuberculous, the mistake does no harm. On the other hand, if we fail to recognise these diseases in their incipiency we do great mischief. The time when the tubercle bacillus shows itself in the sputum varies materially with the different forms of pulmonary tuberculosis. You will frequently have cases of pulmonary tuberculosis which you will examine until the end almost

and the sputum will fail to show the presence of the bacilli. Those are the cases where you have the nodulary form of tuberculosis, not the infiltrating form and the form which does not break down. This appears to me to be one of the most important points which has been brought out in this discussion and I wish to emphasise very emphatically what both Dr. Rochester and Dr. Ely state in connection with it.

Dr. LOVELAND, of Clifton Springs: The subject of the Adirondacks in winter as a resort for consumptives has come within my observation on several occasions and I quite agree with what Dr. Snow has said, that it is, in my experience among my patients, more beneficial in the winter than in the summer. One point I felt like speaking of in connection with the subject, which seems to me in many cases to be overlooked, is the necessity of getting the patient started upon a diet which will be sufficiently nutritious and getting them, so to speak, in the habit of eating enough nutritious food before they go at all. I have seen patients sent for climatic change and given creosote in large quantities and all the various things that are all right, but nothing said about, for instance, how many eggs or how much milk or how much meat they shall take, and the patient going on with no attention very definitely given to diet, does not do well. The diet is such a strong help in any climatic condition that it should not be overlooked.

Dr. SNOW: There is not much to add, except to thank the gentlemen who have discussed the paper, and place emphasis on the point that the Adirondack climate is of particular value in tubercular cases during the colder months.

REPORT OF A CASE OF JACKSONIAN EPILEPSY.[1]

BY F. H. STEPHENSON, M. D., Syracuse, N. Y.
Neurologist to Hospital for Women and Children.

MRS. B. came under my observation in June, 1886, suffering from very severe nocturnal headaches, these subsiding to a great extent early in the morning, leaving her head very sensitive to the slightest jar or noise. There was also marked tenderness of the entire scalp. The temperature was slightly elevated, registering 101°. The tongue was coated and there was an irregular rash on the chest and forehead, also a characteristic flat, scaly, dull colored syphilitic eruption on the inner side of the palms and wrists. Urinary analysis revealed no abnormality of the kidneys, nor was there constipation or other irregularities.

Mercurial inunction speedily controlled the headaches and other uncomfortable symptoms. A thorough course of medication, *i. e.*, mercurials, iodide of potassium and tonics, was continued at regular

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

intervals during the following three years. The patient gained flesh and remained in good health during this period, although she was greatly worried and overtaxed, having nursed her husband who suffered with and died of general paresis during this interval.

In October, 1890, four years after infection, the patient had a severe attack of bronchitis, family and financial worries followed, causing headache, loss of sleep and a general bad condition at the time she applied for treatment; but she complained of nothing which in any way suggested a rekindling of her old trouble, though she had complained to her family of some pain and a numb feeling in the left arm; also a clutching, prickling sensation and numbness of the left calf. She did not mention these last symptoms to me, thinking they were not of importance.

On November 12th, at 11 A. M., she fell from her chair and had a general convulsion. This ceased in a few minutes, leaving her in a dazed condition. In forty-five minutes the left arm and hand began to be numb and contract, this spasm also affected the shoulder and the left side of the face, which was drawn upward. There was spasmodic action of the eyelids, the head was turned to the left and there was also jerking of the left limb. This convulsion continued, possibly, three or four minutes, when the spasm ceased, leaving the patient exhausted, but perfectly conscious. In fact, consciousness was not lost during any of the convulsions; the patient declared she knew all we said and did, but could give no indication of it. This, we know, is characteristic and diagnostic of Jacksonian epilepsy. Localised spasms of the left face, neck and arm occurred at intervals of about fifteen minutes during the next thirty hours, when they were followed by another general and severe convulsion; still another, though less severe seizure, occurred on the 15th, which was followed by some aphasia and left facial paralysis. Localised spasms recurred at increasing intervals until the 22d, though they became less marked and only momentary.

The pulse and temperature varied little from normal during this period. The evacuations were regular and the urine was normal. There was no anesthesia, hyperesthesia or tremor, although the left arm was much weaker and the grip less strong than normal. There had been no severe continued headache, vomiting, nausea, optic neuritis, or mental symptoms indicative of tubercle gumma, abscess, softening or exostosis, nor history of any injury or other organic derangement.

With the symptoms given and with a history of syphilis, I concluded there must have been a deposit sufficient to cause an irritant on, or in the cortical substance of the brain on the right side and involving the following motor centers: The lower two-thirds of the anterior and lateral central convolution on either side

of the fissure of Rolando, the motor center for the face; the middle third of the same convolution, the motor center for the shoulder, arm and hands. The spasmodic action of the lower extremity being so slight, I concluded the upper part of the convolution was very slightly involved in this possible meningitis, or overlapped by the deposit, although the first, or signal symptoms appeared in the leg. I refer, of course, to the area of the deposit.

The paralysis and motor aphasia passed away after a few days' treatment; these facts showed there was no organic change or thrombus in the brain. The aphasia was due probably to fluctuations of blood pressure or possibly to another slight focus of irritation. The fact of her having a few general convulsions would suggest the probability of a hemorrhage, but as no paralysis followed, only a weakness of the arm, and as the seizures were soon controlled, this idea was dissipated and my conclusion was that they were due to shock.

The convulsions were partially controlled by ether and enema, containing potassium bromide and morphia, in large doses, to lessen reflex irritability. Twenty drops of saturated solution of iodide of potassium were given at once, increasing the dose five grains every four hours until one hundred grains were taken. Each alternate dose was doubled and given in an enema, thus saving the stomach the severe distress and irritation which might follow. Inunctions of mercurial ointment of two drachms each were given on the softer surfaces of the body. As soon as chemico-physiological effects were obtained from these remedies, spasmodic action lessened and, as reported, finally entirely ceased. Some headache and numbness of the left arm and leg recurred until February 1st, after which date there were no symptoms to indicate the ordeal through which she had passed. Treatment was continued, taking alternately the iodide in increasing doses, then diminishing and using the mercurial inunction and tonics, thus effecting apparently a complete absorption of this deposit.

The patient remained well until March, 1896, ten years after infection, when some severe head pains accompanied by numbness, twitching and a grasping sensation of the left calf muscles caused her to report again for treatment. The old regime was carried out for six months, though all signal symptoms ceased after two weeks' treatment. In March, 1897, there was a repetition of the symptoms just given, suggesting increased cortical irritation, though after all of these years we have no symptoms pointing to

serious organic change. *Doubtless* the epileptic attacks would develop were our treatment otherwise than vigorous at the outset.

We would hardly resort to surgical measures in such a case, although the point of irritation is fairly well known, because of the prompt control of the symptoms by internal remedies, and from the fact of there being a complete remission of all former symptoms and no constitutional or psychical disturbances.

This complete remission of symptoms is characteristic of syphilis and is an interesting factor of that disease. So long a period of central irritation, ten years, had it been otherwise than of specific origin, which yielded to treatment, would doubtless have developed serious inroads into the brain, causing death or imbecility. Sometimes partial convulsions, or Jacksonian seizures become general convulsions (incidentally, let me say Jacksonian seizures are caused by uremia), but irritation of the motor centers from the various growths, deposits or meningo-encephalitis are the most frequent causes of this form of epilepsy.

312 Warren Street.

THE USE OF THE FLUOROMETER IN RÖNTGEN RAY WORK.[1]

By JOHN DENNIS, Rochester, N. Y.

DURING the brief minutes allotted to this paper, it would obviously be impossible to enter upon a disquisition on the Röntgen energy, if, indeed, it would not be a work of supererogation. You are all familiar with the general principles of this strange force, in so far as they have been demonstrated. The effort, therefore, will be to confine consideration to personal researches on the lines of using the energy as an aid to surgeons and physicians.

Every devotee of the Röntgen energy who desires to utilise it in surgery is confronted with some very serious and not always fully understood conditions; conditions which must be recognised and rectified before the force can be relied upon as a guide in the search for the normally invisible in the human organism.

The effect of the force becomes manifest to the observer in the form of a shadow, whether it be the manifestation on the screen

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

of the fluoroscope, or the result of action on a sensitive, photographic plate; it is a shadow and a shadow only. This shadow is subject to very grave distortions. In the first place, the slightest variation in the position of the subject, with reference to the source of energy, produces a grotesque effect in the shadow of the subject itself. The grotesque effect in the shadow of any impermeable object inside of the subject is still more marked. Take an orange and place a bit of metal just inside, at say the stem end, then hold the orange firmly against the screen of the fluoroscope before the tube, change your position laterally, ever so little, and you will observe that metal travel round the end of the orange in a manner which is uncanny. You will not at first believe the evidence of your own eyes.

There is, then, a proper position in which to place a subject in order to produce a correct shadow. Having accomplished this result, the operator is still in trouble. The rays constitute true radii, with the point of convergence at the center of the anode of a focus tube. From this point the lines of force proceed straight toward infinity. The first authentic instance of deflecting the force by means of a magnet is yet to be noted, although a magnet will affect the cathode rays in the tube. Such being the case, there is the further distortion caused by the radiation of the lines of force.

To rectify this distortion of position and the distortion caused by the radiation of the force, in order that surgeons and physicians might be able to form correct conclusions in Röntgen work, was the problem which presented itself in devising the instrument called the fluorometer. Time will not admit of entering into all the details of the labors in this behalf. You are asked to give credit for candor in the statement of results, which have been fully verified in private practice and hospital practice, as well as in the laboratory.

By means of the appliance, which has been called for convenience the fluorometer, the physician or surgeon or any other experimenter in the field of the Röntgen energy is enabled to accomplish these results unerringly:

First—To produce a correct shadow of the subject on the field of the fluoroscope, and to reproduce the effect there observed on the sensitive plate, if desired.

Second—To reproduce on the operating table exactly the position occupied by the subject when the observation and fluorograph were taken.

Third—To furnish an accurate cross-section of the subject, with the foreign object or any desired part of the anatomy in close juxtaposition.

Fourth—To fix with exactness the line through that cross-section upon which any foreign substance in the human organism, which is observable on the fluoroscope, is situated and by means of markings on the surface establish that line for future exploration.

Fifth—To establish a second line, at right angles to the first, at the intersection of which two lines the foreign substance is located, with mathematical exactness; that is, for instance, a cross-section of the chest is produced, exactly as if the body were severed at the point desired. Then this "end" is divided by straight lines, at the intersection of which is the more or less impermeable object sought.

Sixth—An undistorted view of any portion of the bones of the skeleton is obtained, which can be manifested in the Röntgen shadow. If it be desired to observe a case of congenital dislocation of the hip in a child, for instance, a cross-section of the child's body is obtained and the observer is furnished also with a vertical line passing through the cross-section at any or all points desired.

In brief, gentlemen, the endeavor is to furnish a certain and unerring guide to your observations of the interior of the human organism, so far as disclosed in the present state of the art, and supply a chart for exploration, which will enable surgeons to proceed with absolute certainty.

Without trespassing in the least on the field of the surgeon or physician, it is the function of the fluorometer to furnish absolute data regarding an object which is more impermeable than its surroundings or other objects, and to indicate its precise situation. The object sought may be a calculus, a bullet, a needle, a bit of glass or a coin in the alimentary canal; or it may be desired to present an undistorted view of a fracture, a dislocation or a diseased bone. That accomplished, the appliance has fulfilled its mission. The fluorometer has no knife, forceps, probe or other surgical attachment. If success has been achieved in furnishing an appliance by which the surgeon can apply his skill to better advantage, if it enables him to more surely avail himself of this wonderful and, indeed, almost supernatural force in the alleviation of human suffering and the saving of human life, then the long and somewhat arduous experiments will not have been in vain.

The object of the endeavor has been to make certain that which is uncertain and to furnish means for unerring diagnosis, so far as diagnosis can be made by means of the Röntgen energy.

MEDICAL EDUCATION—THE STATE LICENSE TO PRACTISE MEDICINE.[1]

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Examiner in obstetrics and president of the State Board of Medical Examiners representing the Medical Society of the State of New York.

THE first proposition of which there is record to separate the teaching and licensing powers in this state came from the medical faculty of the university of Buffalo, as the following minute taken from the records of the college will attest:

UNIVERSITY OF BUFFALO, MEDICAL DEPARTMENT,
February 2, 1864.

On motion of Professor Charles A. Lee, seconded by Professor James P. White, it was

Resolved, That the medical society of the state of New York be requested to appoint a committee to consider the expediency of, and to report a plan for, the appointment of a state board of examiners for the degree of doctor of medicine, and to report at the next meeting of the society.

Resolved, That the same committee be instructed to bring the subject before the next meeting of the American medical association, and that the delegates of this society be instructed to urge the general adoption of the same plan in other states of the union. Carried unanimously.

THOS. F. ROCHESTER,
Chairman.

SANDFORD EASTMAN,
Dean of the Faculty.

The BUFFALO MEDICAL JOURNAL, then edited by Dr. Julius F. Miner, a member of the college faculty, in its issue of February, 1864, commented on the suggestion as follows:

When the graduation of students in medicine is wholly separated from the duty of teaching and an impartial board of examiners shall decide who shall and who shall not receive the degree of doctor in medicine, very much will be accomplished for the elevation and advancement of the profession. It is striking at the very root of a great evil

1. Read at the ninety-second annual meeting of the Medical Society of the State of New York, at Albany, January 25, 1898.

and will meet with opposition; indeed, we have no doubt it will be overwhelmed in the almost unanimous opposition which it will meet from the various institutions now empowered to grant diplomas. . . . . If this reform now suggested and urged upon the profession by the medical college in Buffalo is favored by the other colleges in the state, we shall soon be redeemed from the power and influence of a system which has disgraced the profession, lowered its standard of attainment, reflected obloquy and contempt upon its degree and come well-nigh reducing medicine as learned and practised to the level of a trade.

The JOURNAL's predictions were well founded, for the scheme failed, as it never went beyond the portals of this society.

In 1883, the project was again suggested, this time also in Buffalo. The medical society of the county of Erie, at the instance of Dr. Henry Reed Hopkins, formulated a bill and sent it to this society for approval and formal presentation to the legislature. Here it was debated a year or two and after amendment was finally offered to the legislature. I need not recount the vicissitudes it therein encountered, for the circumstances are yet fresh in the minds of many here present.

After repeated defeats the bill in amended form finally passed both houses, receiving the signature of the governor, June 5, 1890. The law provided for three separate boards of medical examiners, one to represent the medical society of the state of New York, one to represent the homeopathic medical society of the state of New York, and one to represent the eclectic medical society of the state of New York. Each of these societies was directed to send the names of fourteen or more of its members to the regents of the university of the state of New York, from which the regents were directed to appoint a board of seven members to represent each of these several societies.

The law further provided that these boards should organise for duty on or before September 1, 1891, the date when the act should go into effect.

On March 11, 1891, the regents appointed to represent this society as an examining board, in accordance with the law, the following-named examiners: for three years, Dr. William Warren Potter, of Buffalo, Dr. William S. Ely, of Rochester, and Dr. Maurice J. Lewi, of Albany (now in New York); for two years,

Dr. William C. Wey, of Elmira, and Dr. George Ryerson Fowler, of Brooklyn; for one year, Dr. Eugene Beach, of Gloversville, and Dr. J. P. Creveling, of Auburn. The names are here given in the order of their announcement by the regents.

The examiners met in the capitol at Albany, September 1, 1891, and organised as a board by electing William C. Wey president and M. J. Lewi secretary. Dr. Lewi and Dr. Fowler were appointed members of the question committee. The law provided for examination in seven topics and these were distributed among the examiners as follows: anatomy, Dr. Ely; physiology and hygiene, Dr. Wey; chemistry, Dr. Lewi; surgery, Dr. Fowler; obstetrics, Dr. Potter; pathology and diagnosis, Dr. Creveling; therapeutics, practice of medicine and materia medica, Dr. Beach.

During the winter of 1891, the medical students throughout the state succeeded in persuading the legislature to pass a bill exempting all who began the study of medicine before June 5, 1890, from the operations of its provisions. Under this amendment about 900 students were relieved of the state examination. Another attempt was made the following year on the part of the students to procure a further exemption from the provisions of the law, but this was not successful. However, the previous wholesale exemption bill deprived the board of the major part of its anticipated work for more than two years; for it was not until 1894 that our work really began to be effective.

Many attempts have been made to so modify the law as to depreciate its effectiveness as a reform measure in medical education; and while in some instances they have almost succeeded, up to the present the original law is in practical force. It has been once or twice amended at the instance of the regents in order to make its provisions more harmonious and effective.

Last year we had two narrow escapes. It is a well-known fact that the members of the New York state medical association, individually or collectively, opposed from the outset the present practice act; sometimes, indeed, theirs has been the principal antagonism, either to amendments calculated to strengthen it or in proposing amendments that would weaken or emasculate it; or in embarassing its operations in minor ways.

The attempt was made during the legislative session of 1897 to so amend the law as to compel the regents to select one-half

the examiners from that association. If a numerous array of its members at the hearing before the committee; if a forceful presentation of a false premise; or if lurid rhetoric, redolent metaphor and abusive syntax ever deserved to succeed it would seem as if their opportnity had come on the occasion referred to. The little coterie that defended the interests of this society, however, were fortunate in appearing before a singularly intelligent committee, where it proved not difficult to again demonstrate that "Thrice is he armed that hath his quarrel just."

It was, indeed, a fortunate escape, and the impression has been left behind that the attempt will be renewed, probably this present year. Will this society stand idly by and witness the consummation of such an outrage upon its vested rights—to say nothing of the violation of the proprieties of the occasion—as such an amendment would entail? If it would prevent it, a most thorough system of defense must be organised and that speedily. The legislative committee must not be left to fight the battle alone, but a strong phalanx of able and active men—members of this society—must attend at the capitol, if summoned in an emergency.

We escaped another dilemma through a still narrower passage. In spite of the utmost watchfulness a bill passed both houses, which in effect compelled the recognition of licenses of other states, no matter what their standards. It slipped through in the last days of the session, when bills may be passed without the ordinary scrutiny of a committee. Fortunately, however, Governor Black, recognising the dangerous character of the measure, included it in his excellent veto list.

This brings me to the consideration, for a moment, of the recognition of other state licenses. Undoubtedly, it would be most desirable if all the state licenses were interchangeable or interindorsable, for then a licensee of any state could roam all over the country with a free lance. It so happens, however, though twenty-eight or more states grant licenses, that no two have in all respects an equal standard. Some of them merely visé a legal diploma; others examine only candidates that have no diplomas; still others require no preliminary educatiou; while a few grant licenses only to those who give proof of preliminary education, three or four years of medical college teaching and a diploma—to which latter class belongs New York.

To exchange courtesies by granting interstate indorsement of licenses to those from states where standards are lower than ours would be a manifest injustice, a discrimination against our own citizens.

As a remedy, it has been proposed in certain quarters to abolish state examining boards and establish in their stead a national board; but a moment's thought will convince any reflecting mind of the impracticability, not to say impossibility, of carrying out such a scheme. The states will not surrender the right to make their own police regulations, nor will the general government deprive the states of their vested constitutional privileges.

The real remedy consists in establishing uniform standards of requirements in all the states. This should embrace the triad—preliminary education, medical collegiate training, and state examination for license. It would not, or at least ought not to be difficult for the states to determine that a high school diploma, or its equivalent, shall be the minimum of preliminary requirement; and that without this the schools shall not receive students. Colleges should then be required to establish four years' courses and, finally, a state examination of uniform standard in all the states, no candidate to be admitted to it unless he presents a diploma from a school recognised as maintaining the proper preliminaries for graduation.

A national clearing house made up of representatives from the several states could pass upon or visé the diplomas of such as desire to change states—such visé to entitle a diploma to registration in the state in which its holder desires to take up residence. While there are many opinions on this vexed question, most of which are made up from special cases of so-called hardship, there really remains but one equitable solution of the problem and that is for the several states to establish uniform standards of preliminaries, collegiate courses and state examinations.

The character of the examination imposed by the state has been subject of criticism. One critic would ask simpler questions; another would make them more severe; still another says the questions are too bookish, or are not practical in character; yet another would institute a clinical or bedside examination in the hospital wards; while a fifth would have us divide the examination,

making an undergraduate test at the end of two years in anatomy, physiology and chemistry. It is easy to find fault, but difficult to attain the ideal. The fourth proposition is well nigh absurd because, first, it cannot be carried out, and, second, it is unnecessary. We are examiners, not teachers, and our province is simply to determine the nature and value of the instruction candidates have already received and whether it adequately fits them to practise. These latter reasons will apply equally well to the proposition to divide the examinations.

It must not be forgotten that while our law provides for three examining boards, it also says their standards must be alike, except as to therapeutics. In order to attain a common level, it has been found necessary to appoint a question committee, consisting of two members from each board. This committee practically becomes a clearing house, where all questions are scrutinised and finally made up into groups in each topic for the several examinations. It will thus be seen that an examiner is liable to find questions credited to his topic that he did not furnish and, perhaps, to which he himself objects. This makes him apparently responsible for a group of questions at a given examination that, as a whole, he did not propound—a condition of things that appears somewhat incongruous. Nevertheless, it serves to maintain a standard of uniformity in all the boards; and I venture to assert that, in the main, the questions of the New York boards take an average rank or standing with any propounded at the schools or by other examining boards.

On the whole, our examination is regarded by medical teachers of high standing and by other state examining boards as a post-graduate test of a creditable nature. Candidates, too, have almost invariably commended it for fairness, thoroughness and excellence. The few that have complained have been imperfectly trained in the schools and have not been properly equipped to practise medicine. Even many who have been rejected praise the quality and impartiality of the test. College teachers in general have become our strongest allies and would not go back to the old way if they could.

Permit me to quote a letter from a distinguished teacher, which is a type of many similar statements, verbally or in writing, made to me on the subject. The letter reads in part as follows:

The influence of the state examination upon our institution has been most beneficial. In proportion as the requirements have been increased

in kind and numbers we have had a larger attendance as well as a better class of students. The advantages of teaching educated men, as compared with the more ignorant students of previous years, are apparent to every teacher, in that we are no longer required to condense and simplify our lectures, but we can go deeply into the subjects proper and do better and more advanced work. This is an advantage both to the student and the teacher and is telling in the better class of graduates which we are able to turn out.

JOHN PARMENTER,
Secretary Faculty Med. Dept., University of Buffalo.

While the present system is commendable in guarding the entrance doors to medicine, our laws or their administration are imperfect or inadequate to control or prevent itinerant quacks, christian-science mountebanks, galvano-magnetic fakirs and other illegal practitioners from preying upon an unwary public.

In the county of New York it is true that, under the vigilance of a splendidly organised medical society, many convictions have been secured and a large sum in fines has been collected, yet in the county of Erie not one prosecution has even been undertaken. The prosecuting attorney of the county seems loath to proceed on the evidence furnished by the board of censors. Surely a law that is adequate to bring dismay to its violators in New York ought to be equally potent in Erie!

In Kentucky, where the law relating to medical education is much inferior to ours, it has been found stout enough to drive 1,150 irregulars from the state, so that now it is not infested by a single illegal practitioner of medicine, nor can such regain a footing within its territory. The profession of the blue grass state is to be congratulated upon this splendid record and upon the example it has set for other commonwealths.

It has always seemed to me that it would be a good plan if our college teachers would carefully inform their pupils as to the working of the practice law. Let students be told that the state examination is one of the proper safeguards erected by the states for the protection of the people against fraud and incompetency; and that the state license is a prize to be won in the race for professional standing and not a *bête noir*—not something to be dreaded and to be resisted. We try to make our examinations fair and

practicable, free from catch questions and to represent a test that demands only such knowledge as any and every candidate ought to possess before offering his services in behalf of the sick or injured.

It is interesting to observe what has been accomplished by the act creating state boards of medical examiners. In 1890, two years of collegiate training were sufficient to entitle a candidate to a degree. Nor were there any restrictions or regulations as to preliminary requirements; that entire question was left to the colleges themselves and they generally looked with indifference upon an applicant's literary attainments or want of such. Finally, there were no examinations for state license, hence each possessor of a legal medical diploma, no matter how obtained, might offer his professional services to an unwary public.

On the other hand, the medical graduate of 1898 must at least be a good English scholar, must have had three or four years of college work and must successfully pass the state board with an average standing of 75 or more points.

Since September 1, 1891, the state boards have examined 3,103 candidates and have rejected 704 or 22.68 per cent. When it is remembered that each one examined had already received the indorsement of the schools, it can easily be determined what is the significance of the work of the boards. But more than this: the colleges themselves have become more conservative. I know an instance in which a college faculty turned back twenty candidates in its class of '97. How many of these, think you, would have been refused diplomas in 1890?

A further factor to be taken into account is the rejection by the regents' office of a large number of informal applications for license from persons unable to meet the requirements. A conservative estimate of such applications and rejections, as shown by the records of the regents' office, would swell to at least 30, the per cent. of the whole number of applicants that have failed to obtain the license of the state of New York to practise medicine.[1]

When the legislature can be persuaded to recognise no propositions to amend the present law that do not originate in this society or the regents' office, and when it can be prevailed upon to so

1. Regents' Examination Bulletin, November, 1897.

strengthen the statute as to suppress every illegal practitioner within the borders of the state, then can we truly feel that a great work has been accomplished, leaving the medical profession of the empire state above suspicion and beyond reproach.

284 FRANKLIN STREET.

Clinical Lecture.

GENITO-URINARY DISEASES—CIRCUMCISION.[1]

BY B. H. DAGGETT, M. D.
REPORTED BY ROSS G. LOOP, M. D.

CIRCUMCISION is a procedure older than history and is traced back into the mists of tradition and mythology. There is a legend that an Atlantean king ordered his entire army circumcised in order to escape a prevailing scourge. Bergman states that circumcision was at one time performed for the purpose of making an indestructible mark of servitude.[2] The Basanta, of Australia, do the circular operation and place the excised portion upon the middle finger of the left hand for a ring and many other savage tribes perform some one of the various operations of circumcision and associate with it elaborate ceremonies and curious observances. It was practised by the Egyptians six centuries before Christ. The uncircumcised were looked upon with disfavor in the V. century. It was common among the Arabs long before the days of Mohammed, who was himself circumcised, and who is reported to have said: "Circumcision is an ordinance for men and honorable in women." In Turkey, a tax was levied upon the uncircumcised, while in Rome it was placed upon the circumcised.

The command to Abraham was as follows: "This is my covenant, which ye shall keep between me and you, and thy seed after thee: every man child among you shall be circumcised, and ye shall circumcise the flesh of the fore-skin, and it shall be a covenant betwixt thee and me."

Paul was charged with disregarding the law, forsaking the teaching of Moses, and attempting to abolish circumcision. Sarah conceived after the circumcision of Abraham.

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1. Delivered at the Erie County Hospital, Buffalo, N. Y., December, 1897.
2. Remondino, Circumcision.

Circumcision has been performed as a purely religious rite, a covenant and an offering, without any thought of sanitary benefit, and had its origin as a general practice with the foundation of the Hebraic creed, in the hills of Chaldea. It was designated as a law of perpetual obligation upon the Hebrew family, under penalty of excommunication. Remondino says: "There are Hebrews, however, who look upon the practice as an arbitrary rule of the remote past and claim that it is hygienic, that it has no ritual significance and that in modern times it has no purpose or use, except that relating to pathology.

Nearly every man child is born into the world phymosed and if he lives to old age uncircumcised goes out of it in the same condition. After a few years of growth and development, together with frequent ablutions, this state of affairs is usually satisfactorily adjusted by nature and all goes well, until, with declining age and abatement of the genital function, the wasting phallus again withdraws within its preputial folds and becomes redolent with urinary and smegmatic exhalations.

It is evident that there was more than a sanitary or ritual purpose in this practice, since the circumcised phallus was an emblem of civil and religious orthodoxy, the symbol of national honor, an object of worship and was grasped in the hand when executing the jurat of the period. It is claimed that the prepuce, like the climbing and auricular muscles and other functionless organs of the body, is a relic of man's sylvian and barbaric existence and which has not yet been eradicated in the process of evolution. During those primitive days the prepuce served to protect the glans from erosion by briar and bramble as men sped upon all fours through primeval forests or climbed the first friendly tree to escape his gastronomic enemy.

Ricord called the prepuce a useless bit of flesh; Remondino said it has neither use nor beauty, and Puzy, of Liverpool, says it makes most excellent skin grafts.

Phymosis signifies to tie with a string and is applied to both the redundant, retractable and unretractable foreskin. The complications arising from phymosis are balanites, balano-posthitis; adhesions; hemorrhoids; irritability and dilatation of the bladder, ureters and renal pelves; retention and incontinence of urine; hernia; distortion of the glans and urethra; sexual excitement; spastic palsies; pseudo hip-joint disease; muscular incoördination; cancer and herpes.[1] The dangers arising from this con-

1. Remondino, Circumcision.

dition and the imperative necessity of relief are, therefore, apparent.

Of the various operations for circumcision, the circular is by far the most common and is fully described in your text-books. This operation leaves the glans in an unprotected condition, which hardens the sensitive papillæ and causes atrophy of Tyson's glands. There is another procedure, which consists in slitting through the middle dorsal line from the orificial margin to the corona. This leaves a large lateral ear on either side, which is objected to by adults on esthetic grounds. Slitting the foreskin along the frenum was proposed by Celsus, revived by Cloquet, and condemned by Ricord and others. Remondino, in thin, narrow foreskins, recommends a combination of the dorsal and inferior slits. Dilatation and divulsion have been suggested, but have not received favor from the profession. Lallemand proposed transfixion of the prepuce on the dorsum and over the anfractus and from this point cutting away the flaps. McLeod proposed suturing before removing the prepuce. Gross favored the double slit. Van Buren and Keyes combine the dorsal slit with the Ricord-Bumstead operation. Ligation and the cautery have been used.

In the case before us today, I transfix the dorsal line of the prepuce about one-third of an inch from the orificial margin and carry the incision back to the coronal sulcus. On the inferior surface I make an incision from the prepucial orifice back for about half an inch. These incisions sever all constructing bands. Upon retracting the prepuce, these longitudinal incisions become transverse. The orifice of the prepuce is enlarged by the inferior slit. The lines of incision may be sutured with catgut, silk or silk-worm gut. Below, suture the skin and mucous membrane together, thus forming the new margin of the enlarged orifice. Above, stitch the edges of the skin together. The bulging of tissues at the ends of the new transverse incision, located behind the glans, will soon disappear. In dressing, Friar's balsam, applied to all except the apex of the glans, or collodion applied over the wounds, make an excellent protective. The foreskin must be held retracted until healing is complete.

This operation shortens and widens the prepuce; it sacrifices no tissue; it neither mutilates nor deforms; it reconstructs and creates a cosmetic, esthetic covering for the sensitive glans and its Tysonian brood.

Progress in Medical Science.

MEDICINE, PATHOLOGY AND THERAPEUTICS.

CONDUCTED BY ALBERT T. LYTLE, M. D., Buffalo, N. Y.

INTESTINAL PERISTALSIS BY ANIMAL EXTRACTS AND THE LIKE.

OTT, (*Med. Bulletin*) in experiments on intestinal peristalsis in animals, found that adrenal extract enlarged the lumen of the intestine and increased peristalsis; that spleenic extract produced marked increase of peristaltic waves; that removal of a spleen diminished peristalsis and that feeding dried spleen in the same case caused quickened peristalsis. Thymus and pituitary extracts were negative. Pancreatic extract lowered peristalsis, as do brain and thyroid. Eserin narrows lumen intestine, while pilocarpin and nicotin increase peristalsis. Irritation vagus caused marked contraction, while that of the splanchnics caused marked slowing.

ENTEROPTOSIS.

LANGERHANS (in *Archives für Verdauungskrankheiten, Bd. III., Heft 3,*) concludes that a moderate degree of enteroptosis, when it is consecutive upon frequent child bearing, is physiological and productive of no symptoms. The most frequent symptoms of this condition are those of aggravated dyspepsia, pain and demonstrable abnormality of secretory and motor functions. The descent of abdominal organs changes the mechanical relations, so that lasting injuries sometimes result, due to pressure upon the unprotected kidney, to increased demand upon the propulsive muscles of the stomach and always to a stretching of the mesentery. By the cumulative effect of these numerous and continuous irritations, even though each in itself may be slight, the central nervous system becomes exhausted and, according to individual predisposition, neurasthenia or hysteria with especially pronounced abdominal symptoms supervenes. Chronic constipation is generally a marked condition. Treatment consists—first and most important—in gymnastics of the abdominal muscles and then symptomatic therapeutics.—*Boston Med. and Surg. Jour.*

TREATMENT OF BURNS.

KEEN and DaCosta (*Practitioner*) claim excellent results from the following use of normal salt solution (one teaspoonful table salt to

the pint of water) : The injured part is wrapped in absorbent cotton, soaked with normal salt solution and a bandage applied which contains a trap door for the frequent addition of the solution and the part put strictly at rest. They claim that pain is quickly allayed and that granulation is very rapid, while if skin grafts are required the raw surface is prepared. Pozzi uses saturated solution of potassium nitrate in the same way and claims rapid abolishment of pain. Haas gives the following recipe :

℞	Aristol	grs.	75 to 150
	Olive oil	"	300
	Lanolin.		
	Vaselin	āā "	600

M. Sig.—Use as external application.

INTERNAL TREATMENT OF PYELITIS.

Dr. M. A. Robin (*Deut. Med. Ztg.*, XVIII.,) advises hygienic and dietetic measures ; care to prevent chilling of the body ; strict milk diet as a basis of nourishment, all fish, chicken, veal, beans and spices to be avoided ; alcohol to be positively forbidden ; the administration of sodium benzoate internally, in amount one to four grammes per diem, to check fermentation and the deposit of uric acid. In acute and painful cases he advises a pill, as follows, to be given three times a day :

℞	Larch turpentine	grs.	90 (6.00)
	Camphor	"	90 (6.00)
	Tr. opium	m.	4 (0.25)
	" aconite	"	3 (0.20)

M.—In pill No. 60. div.

—*Am. Med.-Surg. Bull.*

CALOMEL TO ABORT INFLUENZA.

Friedenthal (*Ther. Mont.*) believes calomel very useful in the early stages of influenza. He gives a dose amounting to two grains twice a day to adults or one grain every three or four hours. He gets a fall of temperature in a few hours with a disappearance of the neural pains and an increase in the appetite. As the treatment is inoffensive it can be generally employed. He believes that a cure can be produced in about three days.—*Ther. Gaz.*

METHYLENE BLUE IN ATAXIC PAINS.

LEMOINE (*Jour. des Prac.; Ther. Gaz.*) finds that methylene blue relieves ataxic pains; those which seem best relieved are the darting ones of the limbs and the sensation of a tight band about the patient (girdle pains). The relief is great and prolonged. The effect comes on rapidly. The urine is colored blue in two or three hours. (Do not mistake for methyl blue or pyoktanin, which is poisonous.) The dose is from grains one to three, three or four times a day.

INSOMNIA.

MCPHEDRAM (*Brit. Med. Jour.*) in the treatment of insomnia strongly urges that one seek out diligently and treat intelligently such obvious causes as may be present as disturbances of the alimentary tract, improper diet and constipation; to stimulate the emunctories to produce free elimination of the products of metabolism; to seek and correct local and peripheral irritations and reflex disturbances; to stop overwork and to keep the duties of the patient well within the limits of his capacity; to relieve anxiety; to study and improve the circulation; to correct improper sanitation, and to inculcate good habits. Having done all these then resort to use of hypnotics if required. Attention is directed to the more than occasional serious and even fatal results from the administration of such supposedly harmless drugs as chloral, sulphonal, trional and paraldehyde, much of which is due to choked avenues of elimination, to excessive dosage and to long administration. He, of course, deprecates the use of such hypnotics as morphia, cocaine, bromides, etc.

TO REMOVE SUPERFLUOUS HAIR.

℞	Tinct. iodin	3 parts.
	Oil Terebinthinæ	6 "
	Oil ricini	8 "
	Spirits rect	48 "
	Collodion	100 "

M.—Paint affected part once daily for three or four successive days. When scab comes off hairs will be on under surface.

—PUTTE.

FOR SOFT CORNS.

℞ Iodin	0.13 gram	.....	gr. ii.
Flexible collodion	12.00 "	.....	ʒ iij.
Alcohol	4.00 "	.....	ʒ i.
Potassium iodid	0.13 "	.....	gr. ij.

M.—Paint on at night.

—*Am. Med.-Surg. Bull.*

ANTINEURALGIC LINIMENT.

℞ Ichthyol	1	part.
Mercury ointment	1	"
Chloroform	6	"
Spts. camphor	6	"

M.—Externally. Shake well. Rub upon affected part.

—*Med. Weekly.*

BRONCHITIS.

℞ Terpinol.
Sodium benzoate ..... āā grs. ii.
Saccharum lactis ..... q. s.

M.—In pill No. 1. Make 100.
Sig.—6 to 12 per diem.

—*Prescription.*

ACUTE CORYZA, IF COMMENCED EARLY.

℞ Salol	gr.	xv.
Acid salicylic	"	iij.
Acid tannic	"	j.
Pulv. ac. boracid	ʒ	i.

M. et sig.—Take a pinch as a snuff every hour for six or eight hours. Beware too long use, as will cause margins of nose to become sore.

ORTHOFORM.

In the *Lancet* the new substance orthoform is described as a methylic ether of amidobenzoic acid and as possessing remarkable anesthetic and analgesic properties when locally applied. It is a white crystalline powder without taste or smell and but slowly soluble in water. It is nonpoisonous, rather slow in action, but

persistent in effect. It is antiseptic, diminishes secretion and can be used internally and upon broken surfaces in large amounts; as much as 700 grains has been applied to a carcinoma of the face in one week without untoward effects. The hydrochlorate is readily soluble in water, but the solution is too acid for use in the eyes, although it can be used internally; a saturated watery solution is suitable for local use; while a dose of 7½ grains of the hydrochlorate internally several times a day produces no untoward symptoms; it would seem indicated in gastric ulcer and cancer. Orthoform is shown to be superior in its application to cocaine or eucaine and altogether harmless so far as reported.

DIPHTHERIA.

Reisman in the *Phila. Med. Jour.* reports a case of diphtheria under peculiar conditions. A bacteriologist accidentally received some of a virulent diphtheria-germ culture into the back of his mouth; he immediately ejected the material, but took no other precaution against infection. Two days later white patches were discovered upon the tonsils which a culture showed to be diphtheritic. Immediately 2000 antitoxin units were injected, about eight hours later another 2000 units were used, while the next day a third 2000 units were injected. The patches disappeared upon the fifth day, but despite local applications the bacillus remained for nearly three weeks. The case shows the minimum time of incubation and the curative power and necessity for large and early dosage of antitoxin.

TREATMENT OF POLYNEURITIS.

The treatment (*Med. Standard*) is divided into five groups, according to the prominent groups of symptoms: (1) Combat pain by use of morphin, antipyrin, sodium salicylate, salophen, or methylene blue internally; by external applications of solution carbolic acid, 4 to 5 per cent.; by judicious use of water and by hypodermic injection at painful areas of a mixture of a 2 per cent. solution acid carbolic, with a 1 per cent. solution morphine in quantity of one cubic centimeter or less. (2) Combat insomnia by use of potassium bromide, morphine (contraindicated in vagus involvement), chloralose, sulfonal, trional, paraldehyde and chloral (in alcoholic neuritis with care). (3) Combat paralysis—if craniobulbar, energetic and prompt measures are demanded—by use of hypodermic injections of caffein, ether and camphor, using faradism

if dyspnea and cyanosis be present; use mustard applications, thrashing with cold cloths, faradisation, oxygen and strychnin. (4) Combat deformities due to defective attitudes and tendon retractions by the use of splints and bandages to retain the parts in normal attitudes. (5) Curative: give a diet rich in phosphorus, hot baths, salt baths, strychnin, electricity—galvanic and faradic,—fresh air and sunlight.

PEDIATRICS.

CONDUCTED BY MAUD JOSEPHINE FRYE, M. D.,
Physician to the babies' ward, Erie County Hospital.

INTUSSUSCEPTION FOLLOWING DYSENTERY.

HULETT, H. L., of Allentown, N. Y., (*Archives of Pediatrics*, December, 1897,) reports an interesting case in a child of fifteen months, resulting in recovery. The child was ill for about a week with a sharp attack of dysentery, accompanied by tenesmus, which could not be entirely controlled. Twelve days after the onset of the illness the baby was suddenly taken worse, with all the symptoms of intussusception—namely, vomiting, soon becoming fecal, small bloody passages, colic, and the appearance of a sausage-shaped tumor in the region of the descending colon. Surgical interference was not deemed advisable on account of the child's extreme prostration. The treatment which eventually saved the child's life was high hot water injections every six hours, tincture of opium to the limit, brandy with white of egg and, later, peptonised milk as nourishment. The child was kept in a reclining position on the right side, the hips being elevated.

MILK POISONING DUE TO PASTEURISED MILK.

KOPLIK (*Medical Record*, February 19, 1898,) takes ground against the use of Pasteurised milk as a food for infants and children. Pasteurisation of milk is a process which did not obtain the sanction of the master whose name it bears. Germs will always exist in milk obtained even from model dairies. The milk given to the vast number of our infants in large cities will be milk which, even if free from bacteria of disease, like tuberculosis, diphtheria, typhoid fever and scarlet fever, will still have a supply of bacteria indigenous to the milk, which must always be reckoned with. These are the bacteria to be considered as etiological factors in the

causation of gastro-intestinal disorders of infancy and childhood. The most deleterious of these germs are not affected by Pasteurisation as at present carried out.

There develop in certain cases fed on Pasteurised milk a distinct set of symptoms, sometimes insidious, sometimes marked and troublesome, to which Koplik applies the term "milk-poisoning." In many cases the first symptom will be a looseness of the bowels. Children who have had only one movement or a constipated movement will suddenly have five, six or seven loose movements. At first the movements will have a yellow, curdled, lumpy appearance and a distinct acid odor, or they will have an admixture of green and an intensely disagreeable odor. Such an infant is restless, has colicky pains and a slight rise or no rise of temperature. In other cases the baby, who is apparently in good health, with three or four normal stools a day, will have a large number of greenish, ill-smelling movements of a very acid character and then after a dose of oil will relapse to a normal state. In other cases children will have one to three normal movements a day, followed by a large semifluid movement of extremely acid character and a distinctly penetrating sour odor. After such a movement the patient feels weak. In some cases the movements are simply increased in number for that patient. They are normal in color and odor, but more fluid than they should be, and the patient does not seem to increase in weight. There may be a slight rise of temperature toward evening. The treatment for all these cases is the substitution of sterilised for Pasteurised milk.

So far as a study of waste products can teach, Dr. Koplik has found little difference in the digestibility of raw, Pasteurised or sterilised milk, continuously prepared or modified in the same way, when administered to the same infant.

Sterilisation in the household must be carried on in a closed steam steriliser, where the temperature reaches 100° C. or close to this point. The milk should be maintained at this temperature for at least ten minutes. The milk should be cooled and then kept on ice or in a refrigerator below 20° C. until given to the infant.

DIFFICULT DEFECATION IN INFANTS.

Martin (*Jour. Am. Med. Ass'n*, February 19, 1898,) gives the result of some interesting post mortem work on the anatomy of the rectum and sigmoid in infancy. It is generally recognised

that the infant strains at stool. Dr. Martin finds the reason in the imperfect development of the anatomic features concerned in the mechanism of expulsion. These are as follows: The infant's lower gut is muscularly deficient. Its mobility within the abdomen, due to relatively long peritoneal attachments, is obstructive to defecation. The rectal valves appear to bear the same proportion to the gut in both adult and infant, but owing to lack of muscular development they offer disproportionate resistance. The infant's anus not being sufficiently expansible is also obstructive. For the normally formed infant the physician will find the solution of the problem of difficult defecation in the solution of the stool.

SOME NEW METHODS OF RESUSCITATING STILL-BORN AND FEEBLE-BORN INFANTS.

Bedford Brown (*Therapeutic Gazette*, June 15, 1897,) presents some valuable suggestions on this subject. He defines the still-born as an infant presenting all the indications of suspended animation, but capable of resuscitation. The condition may be distinguished from the dead-born by the rapid fall of the rectal temperature to 10° or 15° below normal in the latter case. Until such a fall of temperature is observed in the apparently dead-born child, efforts of resuscitation should be continued. An additional sign is the pupil. In the dead-born it is widely dilated; in the still-born but little if at all relaxed. The method of treatment advocated by the writer is to inject into each arm by hypodermic syringe four or five drops of whisky and a single drop of tincture of belladonna. This is done whether the infant be apparently dead or only feeble-born. If following this there is only a feeble response, or none at all, a drachm or two of warm, sterilised water is injected under the skin and about two drachms with a drop of aromatic spirits of ammonia into the intestines. If there is still no reaction and the temperature continues to decline while these measures are in progress, it is a fair test of the absence of vitality.

In the case of the still-born, very soon after the hypodermic the eyes suddenly open, the respiratory muscles are brought into action and the shrill cry of the new-born follows. Then cardiac action develops, the pulse becoming perceptible at the wrist and the cyanosis disappearing. The infant is then wrapped up well in warm flannel or cotton wool and placed on a hot water bag. The hypodermics may be repeated if necessary. The author cites some interesting cases showing the practical value of his method.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.,
Professor of ophthalmology in Niagara University Medical College.

PAINLESS EYE OPERATIONS.

BATES, W. H., of New York, (*New York Med. Jour.*, October 16, 1897,) calls attention to the value of a solution of the extract of the suprarenal capsule as a supplement to cocaine. He says that the latter does not prevent pain in many tenotomies and advancements, and in most lachrymal operations, and that inflamed eyes resist the action of cocaine. During the past three years he has operated in more than 100 cases in which the extract was as necessary as cocaine in securing complete anesthesia. He has operated upon inflammatory glaucoma painlessly, using the suprarenal extract to relieve the congestion, so that cocaine was able to anesthetise. He states that Darier, of Paris, has since reported painless iridectomies in these cases from the use of the suprarenal extract and cocaine. He claims that the extract is not objectionable in any way, being neither irritating nor poisonous; it is merely a powerful astringent. The solution must be properly prepared. The solution is prepared by mixing about ten grains of the dried extract powdered gland with half a drachm of water and filtering; it must be prepared just before the operation, since it soon spoils when exposed to the air at the ordinary temperature. Nothing else should be mixed with it. A few drops are used alternately with the cocaine solution.

The writer also advocates the use of a hot salt water (ʒi to one pint) douche, about 115°, to the operated part of the eye, as soon as the operation is finished, while the eye is still under the influence of cocaine. He uses a fountain syringe and employs about three quarts of water. He claims that this prevents the occurrence of pain and soreness after an operation.

THE PURSE STRING SUTURE OF THE CONJUNCTIVA IN CASES OF SOLUTION OF CONTINUITY OF THE CORNEA.

ROHMER, M., of Paris, (*Annales d' Oculistique*, November, 1897,) cites twenty-three cases of the above nature treated by himself with the purse string suture of the conjunctiva, according to the de Wecker method, and one treated by Meyer's method of conjunctival transplantation, with but one failure. He also adds two cases previously reported by Meyer, one by Weiss, of Heidelberg,

one of a burn of the ciliary region, by Norman Hansen, and one of a corneal fistula, seen by Bourgeois; all of which were treated successfully by conjunctival transplantation.

He prefers the method of de Wecker, lays stress on securing the subconjunctival tissue, and insists that this adheres only to the injured area. He has found that the conjunctiva should be, if necessary, dissected back as far as the muscular attachments.

As the indications for the operation he names (1) recent wounds of the cornea, either simple or those which are accompanied with irreducible hernia of the iris, the iris to be first resected; (2) old synechiæ, where the iris is on a level with the surface of the cornea; (3) limited corneal or sclero-corneal staphylomata; (4) corneal ulcers that are complicated with hernia of the iris; (5) corneal fistulæ and irido-cyclitis occurring from infection through a cicatrix; and (6) cases of retarded cicatrisation following cataract operation.—*Annals of Ophthalmology*, January, 1898.

ORIGIN AND NATURE OF THE VITREOUS BODY.

TORNATOLA, M. S., (*Revue Generale d' Ophthalmologie*, December 31, 1897,) claims that the vitreous body is composed in part of fine fibrils (either separate or joined into bundles), of large nucleated mesodermic cells which form and nourish the hyaloid artery, and which disappear with the artery; and in part of smaller bodies, which are either migratory cells or old débris of the larger cells. The fibers can be traced directly to the protoplasm of certain retinal cells, from whence they spring.

The vitreus, he believes, is, therefore, in accordance with his work, of ectodermic origin and with the exception of the cells, which are not necessarily parts of the organ itself, not mesodermic, as is generally supposed.—*Annals of Ophthalmology*, January, 1898.

OBSTETRICS, GYNECOLOGY, PELVIC AND ABDOMINAL SURGERY.

CONDUCTED BY WM. WARREN POTTER, M. D., Buffalo, N. Y., President New York State Medical Examining and Licensing Board.

TO PRESERVE THE PERINEUM.

OLIVER (*Am. Med.-Surg. Bulletin*) says: It is my practice to introduce two fingers of the right hand into the vagina and with each pain stretch the perineum in advance of the head;

I have often found extreme rigidity disappear in a few minutes under this treatment. The patient's attention being occupied by the severity of the pain, no objection is ever raised to this procedure. When the head begins to distend the vulva the real work begins, but full expansion has by this time been secured.

Two fingers are introduced behind the occiput and this part of the head is brought well down under the pubic arch. The diameter of the head passing through the outlet will thus be materially lessened and so also will be the tension on the perineum.

Surgically clean cloths, wrung out in hot water, applied directly to a tense perineum often secures good results.

FIBRO-CYSTIC MAMMARY DEGENERATION.

George F. Hulbert, of St. Louis, (*Am. Jour. Surg. and Gynec.*,) reported to the Southern surgical and gynecological association, at its recent meeting, two cases of fibro-cystic degeneration of the female breast, due to the use of the "bust developer." This apparatus produces a partial vacuum in which the mammary gland is drawn repeatedly, producing an intense hyperemia. As a result of this oft-repeated engorgement the fibro-cystic tumors develop. This form of trauma is probably quite common nowadays and may lead to the formation of many such tumors in the near future. The question of import is: Are the highly-developed busts resultant from the use of the "developers" always pathological? And, if so, what will be the effect on future lactation if the breasts be left unoperated?

TAMPONMENT IN POST-PARTUM HEMORRHAGE.

Dr. Marx, (*New York Med. Jour.*, January 28,) in an article entitled Practical measures in obstetrical management, has this to say in regard to post-partum hemorrhage: Quick, precise action is required. No time is to be lost recalling theoretical measures. Means that have stood the test of time must be used, and used at once, to bring on firm and good uterine contractions. I have thrown aside, he says, everything but one or two measures. I employ but one hot intrauterine douche and if this procedure does not bring about the desired result I do not resort to irrelevant and dangerous measures, such as direct compression, ice, persulphate of iron, lemon, vinegar and the like, *ad infinitum*, but proceed to pack the uterus with gauze, toweling or anything I have at hand.

I never go to a case without five yards of gauze being on hand. This is a surgical means of controlling hemorrhage.

The technique of gauze tamponment is simple: one hand over the uterus, while with the other the gauze is passed in, until no more can be introduced. So long as the gauze remains, bleeding cannot occur. The packing can be safely removed at the end of twenty-four hours and renewed if necessary.—*Medical Age.*

PRECOCIOUS MATURITY.

The *Boston Medical and Surgical Journal* reports the examination of a child one year old. She was fat and healthy; the breasts were enlarged, the nipples not developed; the hair on the pubes was a quarter of an inch long. Townsend observed the process of menstruation; about half a drachm of blood lay on her clothing. The child weighed twenty-eight pounds and was thirty inches in height. At birth she weighed nine pounds; when four months old she cut her first tooth and when examined had seven incisors. The breasts were seen to enlarge at the age of three months and at six months blood issued from the vulva. The mother said the child had menstruated every five weeks.

Mores (*loc. cit.*) observed a similar case; the infant menstruated at nine months and when examined—one year and three months old—was quite regular. Her weight then was thirty-six pounds (at birth it was fourteen pounds); her height was thirty-two and a half inches. The breasts were very well developed, the nipples large with a dark pink areola. The cervix and uterus could be plainly made out on digital examination.

PICRIC ACID DRESSING ON THE UMBILICAL CORD.

Rochon (*Rev. Obstet. Internat.; Brit. Med. Jour.*) points out that three kinds of dressing are applied to the cord, the oily, the moist and the dry. To the first he objects that it is imperfectly antiseptic, and is opposed to the keratogenic transformation of the young epidermic elements; the second method is sufficiently antiseptic, but it delays the fall of the cord, and often leaves an imperfect cicatrix; while the third, by the rapid desiccation of the cord which it causes, produces the danger of premature separation and hemorrhage. He proposes the following: The cord is surrounded by a piece of absorbent cotton, soaked in a 1-200 solution of picric acid. Thus the decomposition of the cord is prevented and cicatrisation of the umbilicus is aided. A single dressing may suffice, but it is best to repeat it on the second or third day.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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IN CASE OF WAR.

WHILE it is to be hoped that the probabilities of war with Spain are yet remote, it is still fitting that the government should be prepared for every emergency that can possibly arise. In the present strained conditions between the two governments it is possible that a new turn to affairs may be presented at any moment. The activity in naval preparations on every hand give token that the administration at Washington is fully alive to the situation. The army, too, is displaying commendable alertness with a view to the adequate defense of our extensive and greatly exposed seacoast.

In the midst of all this energetic preparation it becomes the medical department of both arms of the service to be well organised for active duty on sea and land. Fortunately, there are men of large experience presiding over the medical departments of the army and navy who have seen active service in our late civil war. They have kept pace with all modern improvements relating to the care of sick and wounded and are, therefore, especially fitted to cope with any emergency that can possibly present itself.

It is highly probable in case of war with Spain that the principal fighting will take place upon the sea. Nevertheless, there is a large opportunity for active service on land in the way of erecting and manning defenses all along the coast from Maine to Texas in the East and South, not to speak of California, Oregon and Washington in the West. A large number of medical officers will be needed to care for these troops, and it becomes every medical man fitted for such service to keep himself well prepared for any call that may be made upon him.

There are still living many competent surgeons who served in the civil war who possess excellent organising qualifications, and whose services could be utilised to advantage by the government in the circumstances under contemplation. The experience of such men would be valuable in many ways in putting a new force into the field, details of which we need not now take time nor space to mention, our object simply being to call attention to the general fact.

It is quite true that many of the conditions governing field hospital organisation have materially changed since 1865, yet there are great underlying principles which still hold good. A well-trained, educated civil-war surgeon who has kept pace with events could not fail to be useful at the present time, and we have no doubt there are many such who are yet stimulated with a high spirit of patriotism, and who would gladly enter the service again should necessity arise.

Surgeon-general Sternberg is a man most admirably equipped to direct the medical affairs of the army and it is most fortunate that circumstances have placed him in his present position at this time. He well knows war and war's needs and his eminent scientific attainments command the respect and confidence, not only of the government, but of the medical profession of the civilised world. As president of the American Medical Association this year he will be brought in touch with American physicians of prominence from every quarter of the Union—a circumstance of no mean import at this juncture.

The army, too, is to be congratulated in having at its head major-general Nelson A. Miles, a man who has served in every capacity in which musket and saber are used and who has participated in more active campaigns than any other living soldier of eminence. He is in the very prime of a magnificent manhood and whether as strategist or tactician he has no superior in any country as a superbly-equipped army commander.

Finally, therefore, taken all in all we are in splendid condition for offensive or defensive warfare, and a patriotic people full of energy, inventive genius, financial strength, headed by a well-balanced, capable, statesmanlike executive in the person of President McKinley, may confidently expect a brilliant and successful issue in any undertakings that may become necessary to clear the atmosphere of the present shadow which overhangs our relations with Spain.

MEDICAL LEGISLATION AT ALBANY.

DURING the session of the New York legislature for 1898 a multiplicity of medical bills has been offered, though few possess abiding interest to the medical profession. These bills, for the most part, are of a minor character and appear to stand very little chance of becoming laws. There are three measures of importance, however, and of which we wish to speak in particular.

The most dangerous bill introduced up to the present writing is entitled, An act regulating and legalising the practice of osteopathy in the state of New York and fixing penalties for the violations of the provisions of this act. Of all the ridiculous pretensions to "science" there is only one fake that outranks osteopathy and that is so-called christian science. The one thing to be said in favor of the former over the latter is that it really does something—namely, it rubs and manipulates; whereas the latter appeals wholly to the supernatural and pins its faith on the mysterious. It is a strange commentary on the intelligence of the state of New York to find it seriously considering the legalisation of osteopathy, while Kentucky and other states in the south and west are turning it down as unworthy of attention. It, at best, is a form of massage which it would be as ridiculous to legalise and dignify into a system of medical practice as it would be to so honor the office of an ordinary bath attendant.

The next bill that merits attention is the so-called dispensary bill introduced by a faction of the medical society of the county of New York. The sponsors of this bill came up to Albany to attend the last meeting of the medical society of the state of New York, with the avowed intention of forcing the society to indorse and father the dispensary bill. They were so cocksure of carrying their point that they had previously instructed their delegates "to present the dispensary bill to the society for indorsement; to cast their votes in favor of such indorsement and to vote only for those candidates for officers of the state society who individually pledge themselves to indorse the passage of the bill by the legislature, and to vote against any and all candidates for office who may be opposed to said bill or to any similar bill or legislation." Upon reaching Albany the friends of the dispensary bill soon realised that they had overdone the matter in their hidebound, ironclad instructions, hence the bill was not presented for the consideration of the state medical society. While it cannot be denied that dis-

pensary abuses exist, this bill does not provide the proper way to correct them. It is about as absurd to commit dispensaries to the supervision of the state board of charities as it would be to place trained nurses under similar supervision. We shall expect to see the latter quickly follow in case the former is accomplished.

The third bill to demand adverse criticism is one presented by the medical society of the county of Montgomery to regulate the practice of midwifery. We deem it unwise for the legislature to pass bills of this nature. If this becomes a law each county in the state, one by one, will be encouraged to ask for similar privileges until there will be created sixty separate midwifery boards each with a standard of its own. County midwifery boards as established have not been conspicuous successes. The state should commit this subject to a single board or commission which should be empowered to regulate and standardise the practice throughout the commonwealth.

One of the liveliest hearings of the session took place in the senate chamber, Thursday, March 16, 1898, on Senator Coggeshall's bill amending the public health act in relation to the unlawful practice of medicine, making it a misdemeanor for a person not a physician to "charge or receive any fee or pecuniary reward for a service rendered by himself or an assistant employed by him or under his control in the treatment of or prescription for any disease, defect or deformity, except in giving the treatment known as massage."

We are in ignorance as to the origin of this bill. It certainly was not introduced at the instigation of the medical society of the state of New York, hence ought not to have been given standing or the dignity of a hearing. However, it furnished an opportunity for one of the most amusing, if not silly, scenes ever witnessed at the Capitol.

At 2.30 o'clock Senator Brush, chairman of the senate public health committee, opened the hearing in the senate chamber. The floor and the woman's gallery were packed with christian scientists. Women predominated in the representation and their zeal in opposing the bill was manifest as speaker after speaker defended their faith.

Senator Coggeshall sat with the committee and quietly listened to the arguments and maledictions launched at his bill. When the last speaker for the opposition had finished, he arose and smiled at the women. In a speech glowing with compliments and flowery

metaphor, he regretted that the draft of the bill should have been inadvertently so broad as to include the christian scientists. He expressed sorrow that he had caused so many good women to journey so far and asked the committee to amend the bill so as to except christian scientists from its operation.

His announcement was greeted with a cheer and a wild waving of handkerchiefs and umbrellas. Hundreds of women made a rush for the bar of the senate and surrounded the tall senator from Oneida. They struggled with each other to shake hands with him and when Senator Brush insisted that the floor should be cleared in order that the business of the committee might proceed, the excited women fairly bore Senator Coggeshall from the chamber to the senate parlors, where they made him the center of an impromptu reception which lasted nearly an hour.

The introduction of such bills, unauthorised by an incorporated medical society, is a damage to the cause of advanced medical education and state control. It will be erroneously supposed by many that this bill was introduced by the regular profession of medicine, whereas it was in reality merely political claptrap, unworthy of the dignity of the legislature of the Empire state.

The current session, happily, has been free, thus far, from any general assault upon the medical practice act, which we trust is an indication that such efforts henceforth will cease. This will leave the officials charged with the execution of the law free to turn their attention to the improvement of its working details.

The New York *Medical Record* prints the following in its issue of March 12, 1898 :

> In the recent editorial on osteopathy, the credit for prosecuting quacks should have been given to the medical society of the county of New York and not the state medical society. The latter never does anything in that line unless perhaps in an obstructive way.

We are surprised that so good a journal as the *Record* should make such a *faux pas* as it has in the foregoing paragraph. Every physician familiar with the workings of medical societies knows that the duties referred to by the *Record* pertain to the county societies and that the state medical society has naught, whatever, to do with apprehending or prosecuting violators of the medical practice law. Moreover, the state society was instrumental in framing and obtaining the passage of the act and it borders on

the absurd to charge it with being obstructive in relation to prosecutions under the statute.

Personal.

Dr. Edward N. Brush, of Baltimore, superintendent of the Sheppard and Enoch Pratt Hospital, gave an elaborate dinner about the middle of March at his hospital in honor of the twentieth anniversary of the date of his connection with hospitals for the insane. Many alienists and neurologists were present. Dr. Brush has been most successful in his work at the institutions with which he has been connected, and especially is his administration of the Sheppard and Enoch Pratt Hospital to be commended. Dr. Brush was formerly a resident of Buffalo and an associate editor of this journal.

Dr. William House (Univ. of Buffalo, '95,) has located in Buffalo at The Wayne, 1108 Main street. Dr. House served fifteen months as interne at the Erie county hospital after graduation and eighteen months as resident physician at the Manhattan state hospital. His hours are 8 to 10 in the morning, 1.30 to 3 in the afternoon and 7 to 8 in the evening.

Dr. Dawson Williams has been appointed editor of the *British Medical Journal*, vice Ernest Hart, deceased. Dr. Williams has been connected with the *Journal* for seventeen years and for part of the time as assistant editor. Mr. C. Lewis Taylor, who has been sub-editor for the last eleven years, becomes assistant editor in the place of Dr. Williams.

Dr. Thomas Lothrop, of 153 Delaware avenue, Buffalo, who has been away for the benefit of his health, has returned very much improved and we trust will be soon quite well again. Dr. Lothrop is one of the hard workers in the profession, one of its most useful members and a co-editor of this Journal.

Dr. Frank Whitehill Hinkel, of Buffalo, has removed his office from 305 Delaware avenue to 412 Franklin street. This is a most convenient location and is accessible by street cars from all sections of the city.

Dr. Marcel Hartwig, of Buffalo, has removed from 34 E. Huron street to 884 Main street. This is a most admirable location for a physician and Dr. Hartwig is to be congratulated upon securing it.

Obituary.

Dr. Robert A. Wheaton, of St. Paul, Minn., died February 13, 1898, aged 34 years. The *Western Medical Review* remarks upon this sad event as follows :

Dr. Wheaton had already become one of the most prominent surgeons of the west, and his death will be a great loss to the profession. His death was quite sudden. He had for years been suffering from some brain trouble, an abscess probably, and he was to have submitted to an operation two or three days previous to his death, but for some reason it was put off for a week. He had been out riding just before death came, and while it was known that his condition was serious, none looked for such an immediate sad ending. Dr. Wheaton had been married two years. He was a graduate of the St. Paul and Harvard medical colleges and had spent two years in the Massachusetts general hospital. He was clinical instructor in surgery at the University of Minnesota, a member of the American medical association, the Minnesota state medical society, Massachusetts state medical society, association of military surgeons of the national guard and of the local county society.

Dr. E. Arnold Praeger, of Los Angeles, Cal., died at his residence in that city March 6, 1898, aged 43 years. He was professor of gynecology at the Los Angeles Polyclinic, clinical gynecologist at the free dispensary, Fellow of the Obstetrical Society of London, Fellow of the American Association of Obstetricians and Gynecologists, member of the British and Canadian Medical Associations, member of the Southern California and the Los Angeles County Medical Societies. Dr. Praeger was a man of accomplishments and a skilful surgeon. His death in the prime of young manhood is greatly to be regretted.

Dr. Alonzo S. Hinkley, of Buffalo, died at the hospital of the Sisters of Charity, February 25, 1898, aged 75 years. Dr. Hinkley came to Buffalo in 1856, where he was engaged in the practice of

homeopathic medicine until his recent illness. Besides a widow he leaves one daughter, Mrs. Frederick H. Ferguson, of Buffalo, and six sons, Arthur A., of New York, and Elmer B., George B., Willard E., Frank W. and Alonzo G. of this city.

Jules Emile Pean, the eminent French surgeon, is dead. M. Pean devised the artery catch-forceps that bear his name and left a surgical fame that will last for centuries. He died of pneumonia January 30, 1898, at the age of 67 years, having practised surgery continuously at Paris for more than 45 years. His funeral oration was pronounced by Dr. Samuel Pozzi, the eminent gynecologist, who has lately been chosen life senator.

Mr. Alfred E. Bradley, a student in the medical department of Niagara University, died at the hospital of the Sisters of Charity, March 9, 1898, of typhoid fever after an illness of about ten days' duration. Mr. Bradley had displayed great aptitude for his chosen profession and his work as a student had been of a highly creditable nature. His death was a sad blow to his class.

Dr. W. O. Rodgers, of Omaha, Nebraska, (Medical Department, University of Buffalo, '83,) died at his home March 10, 1898. Dr. Rodgers was examiner-in-chief of the Woodmen of the World and had been identified with fraternal insurance orders during the past ten years. He had secured an extensive professional practice and died lamented by a large acquaintance.

Sir Richard Quain, Bart., physician extraordinary to her Majesty the Queen, president of the General Medical Council, and editor of the *Dictionary of Medicine*, died March 13, 1898, aged 81 years. He was born October 30, 1816, was a fellow of several learned societies, and the author of numerous medical and scientific works.

Dr. J. J. Towle, of Jamestown, N. Y., died at his home in that city March 11, 1898, aged 61 years. He was seized with apoplexy and was found dead in his barn. He was a well-known physician and is survived by a widow, two sons and a daughter.

Society Meetings.

The Niagara Falls Academy of Medicine at its regular monthly meeting, held March 7, 1898, adopted the following preambles and resolutions relating to the osteopathy bill:

Whereas, A bill has been recently introduced in the state legislature by Mr. Raplee, regulating and legalising the practice of osteopathy in the state of New York; and

Whereas, Said bill provides that the so-called science of osteopathy may be practised by individuals without examination or other test as to their fitness to practise any method of treatment of disease; and

Whereas, Section 5 of this bill provides as follows: "The system, method or science of treating diseases of the human body, commonly known as 'osteopathy,' is hereby declared not to be the practice of medicine within the meaning of Chapter 661 of the laws of 1893, entitled 'An act in relation to the public health, constituting Chapter 25 of the general laws,' and is not subject to the provisions of said chapter or to the laws amendatory thereof." Therefore be it

Resolved, That as it has already been held by high authority that any method which aims at the cure of disease practised by any person, is legally the practice of medicine. Be it

Resolved, That the Niagara Falls Academy of Medicine does hereby declare that the practice of osteopathy, so-called, is an attempt to practise the science and art of medicine. Be it further

Resolved, That any attempt to legalise the practice of osteopathy without submitting the applicants to the same examination and test as to their efficiency and ability to practise medicine by any other method, is a direct blow at the high standard reached in this state by the passage of Chapter 661 of the laws of 1893, entitled "An act in relation to the public health, constituting Chapter 25 of the general laws," and is a step backward. Be it further

Resolved, That it is the sense of this academy of medicine that the laws for the protection of public health and the practice of medicine in general should be made more stringent instead of allowing any loophole whereby the public may be imposed on by unscrupulous persons. Be it further

Resolved, That this academy request the representatives of this district in Senate and Assembly to use all honorable means to prevent the passage of the aforesaid mentioned bill.

Dr. Guillemont read a paper on Locomotor ataxia, its recent pathology and treatment. After this was discussed and some routine business transacted the Academy adjourned.

The Buffalo Academy of Medicine held meetings during the month of March, 1898, as follows:

Section on Surgery.—Tuesday evening, March 1st, program: Parasitism in skin diseases, by Dr. F. J. Thornbury; Presentation of case of intraorbital tumor, by Dr. E. E. Blaauw; Exhibition of specimens, by Drs. H. E. Hayd and C. P. Smith.

Section on Medicine.—Tuesday evening, March 8th, program: The relation of bacteria to the normal alimentary canal, by Dr. Herbert U. Williams; Cardio-pulmonary murmurs, by Dr. C. F. Hoover, professor of physical diagnosis, medical department, Western Reserve University, Cleveland, O.

Section on Pathology.—Tuesday evening, March 15th, program: The anatomy and mechanism of the foot considered with reference to certain abnormal conditions, by Dr. L. A. Weigel, Rochester, N. Y. Illustrated by stereopticon.

Section on Obstetrics and Gynecology.—Tuesday evening, March 22d, program: Etiology, pathology, diagnosis and treatment of acute salpingitis, by Dr. Wm. G. Taylor.

The Association of Surgeons of the Southern Railway Company will hold its third annual meeting at the Hygeia Hotel, Old Point Comfort, Virginia, Tuesday and Wednesday, June 21 and 22, 1898, under the presidency of Dr. C. M. Drake, of Atlanta. Several distinguished surgeons from New York, Philadelphia and other cities are expected to be present and address the meeting. A printed program will be issued about June 10th. The Hygeia Hotel has made a special rate of $2.50 a day for members and guests of the association. Correspondence relating to the meeting should be addressed to Dr. T. H. Hancock, secretary, Atlanta, Ga.

The National Confederation of State Medical Examining and Licensing Boards will hold its eighth annual meeting at Denver, Monday, June 6, 1898. A number of interesting papers will be presented relating to state control in medicine and a report by the committee on preliminary requirements for entrance to medical study will be presented. Correspondence relating to the meeting should be addressed to Dr. A. Walter Suiter, secretary, Herkimer, N. Y. The sessions are open to all persons interested in the subjects discussed.

The American Medical Association will hold its fifty-first annual meeting at Denver, June 7–10, 1898, under the presidency of Brigadier-General George M. Sternberg, M. D., surgeon-general of the U. S. army. Preparations for the meeting are well advanced, hotel accommodations are ample and reasonable and everything portends a large and interesting meeting.

The American Electro-therapeutic Association will hold its seventh annual meeting at Buffalo, September 13, 14 and 15, 1898, under the presidency of Dr. Charles R. Dickson, of Toronto. The titles of papers to be read at the meeting should be furnished to Dr. John Gerin, secretary, 68 North street, Auburn.

The American Academy of Medicine, as announced in our March edition, (q. v.) will hold its twenty-third annual meeting at Denver, June 4 and 6, 1898. Those who desire to join an excursion of the Fellows to Denver should communicate with Dr. Charles McIntire, secretary, Easton, Pa.

The American Medical Publishers' Association will hold its fifth annual meeting at Denver, Col., Monday, June 6, 1898. Contributors who desire to be heard at the meeting should send titles of their papers at once to Charles Wood Fassett, secretary, St. Joseph, Mo.

Medical College and Hospital Notes.

The Medical Department of the University of Buffalo will hold its fifty-second annual commencement Tuesday, April 26, 1898. The alumni association will hold its twenty-fourth annual meeting at Alumni Hall in the college building during the morning and afternoon of the same day. The annual banquet of the faculty, officers and alumni will be given at the Ellicott Club in the evening. An elaborate program is in preparation, which will embrace a number of interesting papers and addresses. The alumni should attend these annual exercises in full force.

The Medical Department of Niagara University will hold its thirteenth annual convocation Wednesday, May 11, 1898. The

alumni association will hold its annual meeting at the college building on Ellicott street in the morning and afternoon, and the annual banquet in the evening. A program is preparing that will prove full of interest, embracing papers, addresses and speeches. All alumni and others interested in these ceremonies are earnestly and cordially invited to attend.

The New York Skin and Cancer Hospital opened its new building, corner of Second avenue and Nineteenth street, March 5, 1898. It is a modern fire-proof structure of four stories and basement, containing about sixty beds for patients, seven of which are in private rooms. On the top floor there is a modern operating room, well equipped, the Worden ward for children, and most of the private rooms. On the next two floors are four wards, for male and female patients with diseases of the skin and cancer. On the ground floor is the large dispensary room, with consulting rooms, drug room, office, reception room, and the like. In the basement there is a complete set of baths, including Turkish, Russian and plunge, besides the kitchen, laundry and dining room. The lighting, heating and ventilation are of the most approved kind.

The occupation of the new building marks the fifteenth anniversary of the institution, as the first patient was admitted to the old building in Thirty-fourth street, on February 26, 1883. Dr. A. Jacobi, president of the medical board of the hospital, made brief introductory remarks at the ceremony, and Dr. L. Duncan Bulkley, who was the originator of the hospital, and is now acting as its secretary, made an address on The care of diseases of the skin and cancer in New York and elsewhere. He called attention to the fact that the old city of New York had increased in size, in the last ten years, at the rate of 50,000 inhabitants yearly, and suggested that hospital accommodations during this time had not increased proportionately. In regard to special hospitals he mentioned four or five for diseases of the eye and ear, several for diseases of women, several lying-in hospitals, a number for infants and children, two for the crippled, one for the throat, and public and private hospitals for contagious diseases, but stated that diseases of the skin and cancer had been neglected, until the establishment of the New York skin and cancer hospital fifteen years ago.

Paris has the great Hôpital St. Louis, with 500 to 600 beds for skin diseases, Vienna 200 to 300 beds, also there are large special accom-

modations for this class of patients in Berlin, Prague, Budapest, Copenhagen, Stockholm, St. Petersburg, Moscow, Rome, Palermo, Padua and many other cities, and twelve special hospitals for skin diseases in Great Britain. Relatively little had been done for cancer, the London cancer hospital standing almost alone.

Dr. Bulkley gave an account of the formation of the hospital society, and of the early struggles of the institution, and paid a warm tribute to Mrs. D. T. Worden, the secretary of the Ladies' Auxiliary Board, who died in 1887, and for whom the children's ward in the new hospital has been named.

During the past fifteen years the hospital had received some $375,000 from all sources, of which $75,000 had come from the board of patients and sale of drugs in the dispensary. Of the $300,000 which had been donated from outside, the hospital now had $25,000 invested as endowments of five free beds, and had paid $150,000 for the land and building, which was practically free from debt. He then made a strong appeal for funds for permanent endowment and for current expenses, expressing a strong desire for many small contributions from those who should take a personal interest in the work.

During the past fifteen years the hospital has treated 25,031 cases, of which 3,010 were in the cancer department and 22,021 in the skin department. Most of these had been treated as out patients, 22,159 having come to the hospital for treatment 118,154 times. For them 132,263 prescriptions were written by the physicians and surgeons and filled by the hospital druggist. In the beds of the institution there had been treated 2,872 persons, who had spent the enormous total of 165,077 days in the hospital, and of these "hospital days" 117,658 were entirely free. Not only had there been patients of all possible creeds and nationalities, but also patients from almost every state and territory in the union, as this was the only institution of the kind in the United States. He, therefore, appealed strongly for contributions from outside of New York city.

In conclusion Dr. Bulkley called attention to the educational advantages of the hospital, and referred to the thirty young men who had served on its house staff during the past fifteen years, whereby they had received an education in these diseases not to be obtained elsewhere in this country, and second only to prolonged study abroad. He also stated that it was proposed by the management to have clinical lectures in the hospital, free to physicians,

where the diagnosis and treatment of the diseases cared for in the hospital could be learned. To aid in this the hospital had the loan of a large collection of wax models from Paris, and several thousand plates and pictures, to be used in the lectures. He remarked that skin diseases were often thought to be unimportant, but felt sure that no one witnessing the work done in the hospital would longer entertain such an opinion. Many of the cases had been horrible in the extreme, causing years of intense suffering and sometimes ending in distressing death.

The Jennie Casseday Free Infirmary for Women, on Sixth street, opposite St. James's Court, has been sold by the King's Daughters to Dr. Lewis S. McMurtry. The infirmary was founded, owned and controlled by the King's Daughters, of Louisville, Ky. It was formally opened for the reception of patients April 12, 1892. The object of the infirmary was the treatment of diseases peculiar to women. All the rooms were furnished by individuals or circles of King's Daughters. The house was equipped throughout in accordance with the most approved methods of hospital management.

Shortly after the infirmary was opened, Dr. L. S. McMurtry was elected surgeon in charge by the lady board of managers. Under his direction the institution gained a wide reputation in all parts of the country. From the day the infirmary was opened it has been filled with patients. The income from the private department has always supported the institution, but there had been a debt on the property which the managers found it embarrassing to meet; therefore, the property, including the equipments, was offered for sale and Dr. McMurtry became the purchaser. The institution will be conducted just as before and will bear its original name.

The Manhattan Eye and Ear Hospital in its twenty-eighth annual report states that the work of the hospital has increased to such an extent that it was found necessary, not infrequently, to perform operations upon the eyes of one patient, and upon the ears, throat or nose of another, at the same time and in the same operating room. In consequence of the inconvenience and embarrassment thus occasioned, the directors decided to do away with the department for diseases of the nervous system, and to convert the large room formerly occupied by that department into an operating-room for the departments of the ear, throat and nose. During the year

the capacity of the hospital was further increased by the utilisation of an adjoining building. In the report attention is particularly called to the care that is exercised in excluding unworthy patients who are able to pay ; it being stated that 10 per cent. were excluded by the superintendent during the year, who acknowledged that they were able to pay for medical or surgical treatment.

Book Reviews.

System of Diseases of the Eye. By American, British, Dutch, French, German and Spanish authors. Edited by William F. Norris, A. M., M. D., and Charles A. Oliver, A. M., M. D., of Philadelphia, Pa., U. S. A. Volume II. Examination of the eye, school hygiene, statistics of blindness and antisepsis. With thirteen full-page plates and 214 text illustrations. Octavo, pp. 556. Philadelphia: J. B. Lippincott Co. 1897.

This second volume of the System of diseases of the eye, like the first, is rich with facts and observations pertaining to the subjects of which it treats. These comprehend examination of the eye, school hygiene, blindness and its prevention and antisepsis. There are fourteen sections and each is contributed by someone whose studies and experience especially fit him to give the best and latest information on the subject which he has in hand.

The first section is On the methods for determining the acuity of vision, and is written by the learned Herman Snellen, M. D., of Utrecht, author of the almost universally used test-types, and professor of ophthalmology in the University of Utrecht, in Holland ; translated by George A. Berry, M. B., F. R. S. C., Ed., lecturer on ophthalmology in the University of Edinburgh, Scotland. It contains a concise statement, in twenty pages, of the principles upon which visual tests should be based and the various objects and methods that have been suggested for use.

Following this, his son, Herman Snellen, Jr., M. D., ophthalmic surgeon to the Netherlands hospital, Utrecht, occupies sixteen pages of the book in describing the substances, their properties and actions, known as mydriatics and myotics. The comparative value of those belonging to each class is discussed and many valuable suggestions are indicated.

The next article, also sixteen pages in length, is on Lateral illumination ; magnifying instruments employed in combination with lateral illumination ; the use of highly magnifying glasses with the ophthalmoscope, by L. Laquer, M. D., professor of ophthalmology, etc., in the University of Strasburg, Germany ; translated by Harry Friedenwald, A. B., M. D., associate professor of ophthalmology and otology, College of Physicians

and Surgeons, of Baltimore, Md. This is an excellent and detailed consideration of a valuable means of diagnosis, giving its history, principles and application and the various forms of instruments that have been and are used, both separately and combined with the ophthalmoscope and magnifying glasses.

In the next twenty-six pages, George M. Gould, A. M., M. D., of Philadelphia, describes The ophthalmoscope and the art of ophthalmoscopy in a well-written and comprehensive article. It reviews the history of the ophthalmoscope, the various forms of the instrument, the methods of using it and what may be seen with it in a normal eye and in one with congenital defects.

Skiascopy (the shadow-test, retinoscopy,) and its practical application is treated by Edward Jackson, A. M., M. D., professor of diseases of the eye in the Philadelphia Polyclinic and surgeon to Wills eye hospital, Philadelphia. Twenty-two pages are given to this subject and it is clearly described by a master of the method. He embodies in the article the optical principles on which it is based, the practical application and use of the test, the apparatus needed and a brief historical sketch.

Adolphe Javal, Jr., of Paris, in thirty pages considers Ophthalmometry and its clinical application. This chapter is limited principally to the ophthalmometry, and especially to the Javal and Schiötz form and application, with an incidental reference to keratoscopy by means of a "keratoscopic disk" and to Tscherning's "ophthalmophakometer." It is an instructive article, but it seems unfortunate that "ophthalmometry" ever should have been made to signify measurements of the cornea, instead of all parts of the eye, according to the etymological sense of the word. Keratometry would be a much better term.

Prisms and prismometry, by William S. Dennett, M. D., of New York, surgeon to the New York eye and ear infirmary, occupies twenty-six pages, and is an exposition of the subject which will commend itself, both to the mathematical and non-mathematical mind. The optical principles involved are elucidated by mathematical formulæ, and the practical application of prisms in ophthalmology is clearly set forth.

Next follows a chapter of twenty-two pages by George T. Stevens, M. D., Ph. D., of New York, on The principles of and the methods for the estimation of the balance of the extraocular muscles. In this is described the various anomalies of muscular balance, together with the nomenclature which the author has devised and which is already quite generally accepted and the various methods of determining and measuring them.

The succeeding article on Perimetry and its clinical value is the most extended in the book, covering 126 pages, and is entirely out of proportion to the other articles as compared to the importance of the subjects. It is written by Herman Wilbrand, M. D., ophthalmic surgeon to the general hospital of Hamburg, Germany, and translated by Thomas R. Pooley, M. D., formerly professor

of ophthalmology in the New York Polyclinic and surgeon to the New Amsterdam eye and ear hospital, New York. It is divided into a general part and a special part. In the former is described the field of vision under varying conditions and the methods used for measuring and recording it; in the latter, the significance of the special changes which take place in the visual fields in (*a*) diseases of the retina and choroid, (*b*) of the optic nerves within the orbit, (*c*) of the optic chiasm, (*d*) of the optic tracts, (*e*) of the primary optic centers, (*f*) of the intracerebral tracts leading to the cortical visual centers, (*g*) of the cortical visual centers. All these subjects, as bearing upon the field of vision, are treated in detail. The article is, indeed, a complete treatise in itself, and its study will greatly profit the general practitioner as well as the ophthalmologist.

Detection of color-blindness is a valuable article of thirty-eight pages and is written by William Thomson, M. D., professor of ophthalmology in the Jefferson Medical College and surgeon to the Wills eye hospital, Philadelphia, assisted by Carl Weiland, M. D., of Philadelphia. It is a practical article on a most important subject. Dr. Thomson has done much to bring about the practice of examining railroad employees for color-blindness, and the results of his extended experience and study are embodied in this article.

Perhaps one of the most useful and practical articles of the book is the next one on School hygiene, by S. D. Risley, A. M., M. D., Ph. D., professor of ophthalmology in the Philadelphia Polyclinic and College for Graduates in Medicine, and surgeon to the Wills eye hospital, of Philadelphia. It occupies sixty-six pages and deals with defects of vision in school children and their causes and detection, the necessity for examination of the eyes on entrance to school, the need of correction of refractive errors in school children, and the hygiene of the school-room, including lighting, seating and posturing. The whole article is full of wise suggestions and the following of them would do much to prevent eye diseases and the manifold disturbances arising from eye-strain.

Another important article is the next one, of forty-four pages, on Blindness: its frequency, causes and prevention, by I. Minis Hays, A. M., M. D., of Philadelphia. It first deals with statistics and the relation of climate, age and sex to blindness. Then follow sections on congenital blindness, blindness due to idiopathic diseases of the eye, blindness due to traumatism, blindness due to general diseases, the influence of occupation on eye disease and the prevention and diminution of blindness. Such a survey by such a writer can but impress the reader that preventive measures are of prime importance in diseases of the eye, as well as in diseases of other parts of the body.

The two concluding articles are on Antisepsis, twenty-six pages, by Joseph A. Andrews, M. D., ophthalmic surgeon to the Charity hospital, New York, and The microörganisms of the conjunctiva

and lachrymal sac, fifty-two pages, by Joseph McFarland, M. D., demonstrator of pathological histology in the University of Pennsylvania, and Samuel Stryker Kneass, M. D., adjunct professor of bacteriology in the Philadelphia Polyclinic and School for Graduates in Medicine. The articles present an excellent résumé of the bacteriology of the conjunctiva and lachrymal sac and of the methods and limitations of antisepsis as applied to the eye.

The volume, as a whole, maintains a high standard of excellence, both as regards the matter, the illustrations and the general make-up. Like its predecessor, it can but take high rank in ophthalmological literature. A. A. H.

MANUAL OF GYNECOLOGY. By HENRY T. BYFORD, Professor of Gynecology and Clinical Gynecology in the College of Physicians and Surgeons of Chicago; Professor of Gynecology and Clinical Gynecology in the Woman's Medical School of Northwestern University; Professor of Gynecology in the Post-Graduate Medical School of Chicago. Octavo, pp. xxiii.—596, containing 341 illustrations, many of which are original Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

The demand for a second edition of this work so soon after the first was put forth is an assured indication of its popularity. When writing of the first edition (Volume XXXV., p. 761, April, 1896,) we stated that we regarded Byford's manual as one of the best published. With the improvements the author has made in this new edition we desire to accentuate our former opinion in a most forceful manner.

The author has retained the general arrangement, but has devoted a separate part each to carcinoma, sarcoma and cystic tumors. A new part also has been added on the anatomy of the pelvic organs. Angioma, hypertrophy and atrophy of the uterus have received separate mention and there are new chapters on venereal diseases. The chapters on hyperplasia, chronic inflammation and subinvolution of the uterus have been rewritten, while those on urinary and fecal fistula, and ectopic pregnancy, have been reconstructed.

New illustrations have been added and a system of marginal notes serves to facilitate reference to the text. It is by far the best student's manual in the field and exhibits the work of a master from introduction to index.

OUTLINES OF RURAL HYGIENE. For Physicians, Students and Sanitarians. By HARVEY B. BASHORE, M. D., Inspector for the State Board of Health of Pennsylvania. With an appendix on The Normal Distribution of Chlorine, by Prof. Herbert E. Smith, of Yale University. Illustrated with twenty engravings, pp. vi.—84. Philadelphia, New York, Chicago: The F. A. Davis Co., Publishers.

This little book of seventy-odd pages is one whose value is as great as its pages are few. It deals in a simple and entirely prac-

tical manner with the problems which confront the sanitarian in country districts. The two most important items for the consideration of the country householder—the water supply and waste disposal—are handled in such manner that anyone availing himself of the help of this book may with moderate outlay make his dwelling a sanitary one in these respects. The soil, the relation of ground-air and ground-moisture to the healthfulness of localities and dwellings, house construction with reference to ground-air and ground moisture, the ventilation of dwellings, school hygiene, and the disposal of the dead are other topics considered in this work. The book should be in the possession of every suburban and country physician and in every village library. Indeed, teachers' classes and advanced physiology classes in village high schools might very properly include such a work on hygiene in their courses of study. M. J. F.

CLINICAL METHODS, being an Introduction to the Practical Study of Medicine. By ROBERT HUTCHISON, M. D., M. R. C. P., Demonstrator of Physiology in London Hospital Medical College, and HARRY RAINY, F. R. C. P. P., F. R. S. E., University Tutor in Clinical Medicine, Royal Infirmary, Edinburgh. Duodecimo, pp. 562; 137 engravings and eight colored plates. Philadelphia and New York: Lea Brothers & Co., Publishers.

An approach to perfection in clinical methods is most desirable, and any literature tending to facilitate approximation thereto is to be welcomed. The title of this little work is attractive from its very novelty. Its object is to direct closer attention to clinical investigation by methodising all the details of clinical work from case-taking to diagnosis.

A special chapter is assigned to the examination of children. This will be found of especial interest to every physician who has occasion to treat children. There are also chapters on the examination of pathological fluids and on clinical bacteriology.

The book is prepared by two authors who are thoroughly alive to their subject and who have created a most interesting work that is well illustrated and handsomely printed and bound.

ABBOTT'S BACTERIOLOGY. Fourth and revised edition. Just ready. The Principles of Bacteriology. A practical manual for students and physicians. By A. C. ABBOTT, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania, Philadelphia. Fourth edition, enlarged and thoroughly revised. Handsome 12mo, 542 pages, 106 illustrations, of which nineteen are colored. Philadelphia and New York: Lea Brothers & Co., Publishers.

The previous editions of this excellent work have been noticed in the JOURNAL. The first in the issue for April, 1892, the second in January, 1895, and the third in August, 1896. In this edition

the author attempts to include the more important of the newer suggestions relating to bacteriology and he has introduced illustrated descriptions of the bacillus of bubonic plague, of the bacillus of influenza and of the micrococcus of gonorrhea, and a number of other new illustrations which serve to still further elucidate the text. The appearance of new editions of this work at such short intervals indicates progression in the science of bacteriology and an endeavor on the part of the author to keep pace with it. We commend the book to every student and teacher of bacteriology.

DISEASES OF THE EYE. By EDWARD NETTLESHIP, F. R. C. S., Ophthalmic Surgeon at St. Thomas' Hospital, London; Surgeon to the Royal London (Moorfields) Ophthalmic Hospital. Revised and edited by W. T. HOLMES SPICER, M. A., M. B., F. R. C. S., Ophthalmic Surgeon to the Metropolitan Hospital and to the Victoria Hospital for Children. Fifth American from the sixth English edition. With a Supplement on Color-Blindness, by WILLIAM THOMPSON, M. D., Emeritus Professor of Ophthalmology in the Jefferson Medical College of Philadelphia. With two colored plates and 161 engravings. Duodecimo, pp. 528. Philadelphia and New York: Lea Brothers & Co. 1897.

Nettleship's compendium on diseases of the eye is now in its fifth American and sixth English edition. This fact alone is proof positive of its merits, as judged by the English-speaking profession on both sides of the Atlantic. It supplies a need that does not seem to be met by any other handbook, and has steadily risen in esteem from its first appearance, nearly twenty years ago, up to the present time. It serves the double purpose, so far as it is possible in a single volume, of meeting the requirements of the student by not neglecting the elements of ophthalmology, and of satisfying the needs of the practitioner by clearly enlightening him on subjects pertaining to daily practice.

Each successive edition has been carefully revised and all the essentials of progress in ophthalmology up to the time of issue have been incorporated. Heretofore this has been done by Mr. Nettleship himself, but the revision for the present edition has been entrusted to Mr. Holmes Spicer, a most able ophthalmologist of London and by the American publishers to an equally eminent American authority. The result is that the book not only represents English thought and practice, but also that of American ophthalmologists who differ somewhat from their English confrères on certain subjects. The additions of the American reviser are not numerous and some of them might have been more valuable had he enlarged them somewhat, especially the one on heterophoria.

New life has again been infused in this valuable handbook and it deserves even greater favor than it has ever received before.

A. A. H.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY; being a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators. Collected and arranged with critical editorial comments by eminent American specialists and teachers. Under the general editorial charge of GEORGE M. GOULD, M. D. One volume of nearly 1,200 pages, profusely illustrated with numerous woodcuts in text, and thirty-three half-tone and colored plates. Philadelphia: W. B. Saunders. 1898.

The third annual volume of this important compilation of medical literature is constructed on lines similar to the preceding volumes. The editor-in-chief and his staff have performed a great labor in grouping, abstracting and compiling such an enormous amount of literature and placing it between two covers, thus making it easily accessible as a work of reference.

We have, heretofore, expressed our opinion as to the scope and import of the year-book—an opinion that we wish to reiterate and still further accentuate here and now; in other words, we feel that by and large this is the most comprehensive and valuable of the many year-books, annuals or digests offered to the medical profession. The publisher, too, is entitled to a meed of praise for his part in creating such a handsome volume.

A HANDBOOK OF THERAPEUTICS. By SIDNEY RINGER, M. D., F. R. S. Holme Professor of Clinical Medicine, Universily College; Physician to University College Hospital, and Harrington Sainsbury, M. D., F. R. C. P., Physician to the Royal Free Hospital, and the City of London Hospital for Diseases of the Chest, Victoria Park. Thirteenth edition. Octavo, pp. xi.—746. New York: William Wood & Company. 1897.

It is eight years since the twelfth edition of Ringer's therapeutics visited us, during which time many changes have taken place, not only in therapeutics, but also in materia medica. In Volume XXVIII., p. 625, May, 1889, we made somewhat extended comment upon the twelfth edition of this valuable treatise, which has become well-nigh classic, and to which we refer the reader for a general synopsis as well as an opinion of the work.

The make-up of the book is changed in this edition to small octavo, in place of standard octavo as heretofore. The amount of material, however, is rather increased than diminished, since this edition contains 746 pages against 524 in the twelfth. Owing to the long interval that has elapsed between this and the last edition, the list of new drugs as well as of new methods has been somewhat voluminous and to sift the tried from the untried, the useful from the worthless, the good from the bad, is no light tax upon the ingenuity, judgment, experience and skill of the most accomplished and practical author, yet all this has been most happily accomplished by Ringer.

Serum therapy is accorded a separate chapter and a short section upon the use of the digestive ferments appears in connection with the invalid dietary. The Nauheim-Schott treatment of cardiac failure is herein described in detail. It is important in these days of overwork and underrest, in which cardiac strain is so liable, for the practitioner of medicine to be amply equipped with every known method of prevention and cure of this disorder.

The thirteenth edition continues on the same constructed lines as those that have preceded it, holding high above every other principle that it is of the first importance for symptoms to receive weighty consideration, since in the majority of cases we are compelled to treat the secondary effects of a malady rather than the primary disease. In other words, it is Ringer's constant endeavor to make clinical considerations indicate or contraindicate the employment of remedies; hence the use of drugs in disease are dwelt upon rather than their physiological action, thus making the book a work of clinical therapeutics.

It is a treatise that should be in the hands of every teacher and practitioner of medicine. The publishers have made this the handsomest edition of the work yet issued.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume IV. Seventh series. 1898. Octavo, pp. xii.—363. Philadelphia: J. B. Lippincott Co. 1897.

This volume is divided into the following-named departments: drugs and intermediate agents, treatment, medicine, neurology, surgery, gynecology and obstetrics, ophthalmology, laryngology and rhinology, and dermatology.

The principal contributors are Roberts Bartholow, Harrington Sainsbury, Hobart Amory Hare, D. D. Stewart, I. N. Love, A. A. Eshner, Charles Lyman Greene, John Madison Taylor, Edward D. Fisher, Joseph M. Mathews, James F. W. Ross, Charles Greene Cumston, Paul F. Mundé, Professor Ricard, of Paris, Thomas R. Pooley, William Cheatham and I. E. Atkinson.

The book is constructed on similar lines to its predecessors and is an interesting and useful addition to the physician's library.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume XV. Edited by DEFOREST WILLARD, A. M., M. D., Ph. D., Recorder of the Association. Printed for the Association. For sale by William J. Dornan, Philadelphia. 1897.

This volume contains the papers read before the association at the meeting held May 4–6, 1897, at Washington. It contains the proceedings at the unveiling of the bronze statue of the late professor Samuel D. Gross, M. D., erected at Washington by the American Surgical Association and the alumni association of Jefferson Medical College. These embrace the following items: frontispiece, half-tone engraving of the statue; history of the statue; order of exercises; address at the unveiling by Claudius Henry Mastin, M. D., A. M., LL. D., of Mobile; address on receiving the statue on behalf of the general government by Brigadier-general George M. Sternberg, M. D., LL. D., surgeon-general U. S. Army; address by William W. Keen, M. D., LL. D., of Philadelphia. A pamphlet containing these proceedings has been issued and will be supplied by the printer, Mr. William J. Dornan, at ten cents each.

Other interesting papers in this volume are the presidential address by J. Collins Warren, of Boston, on The influence of anesthesia on surgery; The indications for, and the technique of hysterectomy, by John Homans; The Röntgen rays in surgery, by J. William White; The technique of intracranial surgery, by Louis McLane Tiffany; Symptoms and treatment of hepatic abscess, by George Ben Johnston, and a number of papers relating to the surgery of the abdominal and pelvic viscera, including the intestines.

This was one of the largest and most interesting volumes ever issued by the association.

THE YEAR-BOOK OF TREATMENT FOR 1898. A critical review for practitioners of medicine and surgery. Crown octavo, 488 pages. Philadelphia and New York: Lea Brothers & Co. 1898.

This annual aims to be an epitomé of the most important medical advances of the year preceding its issue. This being the fourteenth volume, ample testimony is thereby given of its popularity. It is well edited and its contributors are men of experience. Its twenty-five chapters are brimful of information that is condensed and easily accessible. We know of no annual that affords the reader as much for his money (cloth, $1.50) as does this one and the possessor of the fourteen volumes may be regarded as extremely fortunate.

The arrangement of the book is very systematic and it is

admirably indexed, thus bringing its subject-matter within convenient and easy reference.

ELEMENTS OF LATIN. For students of medicine and pharmacy. By GEORGE D. CROTHERS, A. M., M. D., Teacher of Latin and Greek in the St. Joseph (Mo.) High School; and HIRAM H. BICE, A. M., Instructor in Latin and Greek in the Boys' High School of New York City, pp. xii.—242. Philadelphia, New York, Chicago: The F. A. Davis Co., Publishers.

An excellent book for those for whom it is designed. It simplifies very much the study of Latin for those unfamiliar with that language.

BOOKS RECEIVED.

Aids to Aseptic Technique. By A. D. Whiting, M. D., Assistant Surgeon to the German Hospital, Philadelphia. Duodecimo, pp. 157. Philadelphia: J. B. Lippincott Company. 1898.

Therapeutics of Infancy and Childhood. By A. Jacobi, M. D., Clinical Professor of the Diseases of Children in the College of Physicians and Surgeons, New York, etc. Crown octavo, pp. xvi.—629. Price, $3.00. Second edition. Philadelphia: J. B. Lippincott Company. 1898.

Proceedings of the American Medico-Psychological Association at the Fifty-third Annual Meeting, held at Baltimore, May 11-14, 1897. C. B. Burr, M. D., Secretary, Flint, Michigan. Published by American Medico-Psychological Association. 1897.

The Elements of Clinical Diagnosis. By Professor Dr. G. Klemperer, Professor of Medicine at the University of Berlin. First American from the seventh (last) edition. Duodecimo, pp. 292, with 61 illustrations. Price, $1.00. Authorised translation by Nathan E. Brill, A. M., M. D., Adjunct Attending Physician Mount Sinai Hospital, New York City, and Samuel M. Brickner, A. M., M. D., Assistant Gynecologist Mount Sinai Hospital, out-patient department. New York: The Macmillan Company, 66 Fifth avenue. 1898.

The Nervous System and Its Diseases: A Practical Treatise on Neurology for the Use of Physicians and Students. By Charles K. Mills, M. D., Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania; Clinical Professor of Neurology in the Woman's Medical College of Pennsylvania; Professor of Diseases of the Nervous System in the Philadelphia Polyclinic; Neurologist to the Philadelphia Hospital, etc. Royal octavo, pp. xxx.—1,056. With 459 illustrations. Philadelphia: J. B. Lippincott Company. 1898.

Mammalian Anatomy: A Preparation for Human and Comparative Anatomy. By Horace Jayne, M. D., Ph. D., Director of the Wistar Institute of Anatomy and Biology; Professor of Zoology in the University of Pennsylvania, etc. Part I. The Skeleton of the Cat; Its Muscular Attachments, Growth and Variations, Compared with the Skeleton of Man. Imperial octavo, pp. xxx.—816. With over 500 original illustrations and many tables. Philadelphia: J. B. Lippincott Company. 1898.

Transactions of the Medical Society of the District of Columbia, from March, 1896, to January, 1897. Editing Committee: W. W. Johnston, M. D., Geo. M. Kober, M. D., and Jas. D. Morgan, M. D. Volume I. 1897.

The Surgical Complications and Sequels of Typhoid Fever. By William W. Keen, M. D., LL.D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; Vice-President of the College of Physicians of Philadelphia, etc. Based upon tables of 1,700 cases, compiled by the author and by Thompson S. Westcott, M. D., Instructor in Diseases of Children, University of Pennsylvania. With a chapter on the Ocular Complications of Typhoid Fever, by George E. de Schweinitz, A. M., M. D., Professor of Ophthalmology, Jefferson Medical College; and as an appendix, The Toner Lecture, No. V. Octavo, pp. 386. Price, $3.00 net. Philadelphia: W. B. Saunders. 1898.

Diseases of Women: A Clinical Guide to Their Diagnosis and Treatment. By G. Ernest Herman, M. B. Lond., F. R. C. P., Obstetric Physician to and Lecturer on Midwifery at the London Hospital; Consulting Physician-Accoucheur to the Tower Hamlets Dispensary; Examiner in Midwifery to the Universities of London and Oxford; Late President of the Obstetrical Society of London and of the Hunterian Society; Formerly Physician to the General Lying-in Hospital and to the Eastern District of the Royal Maternity Charity, and Examiner in Midwifery to the Royal College of Surgeons. One volume of 886 pages, octavo, profusely illustrated. Extra muslin, $5.00 net; leather, $5.75 net. New York: William Wood & Company. 1898.

Transactions of the Nineteenth Annual Meeting of the American Laryngological Association, held at Washington, D. C., May 4, 5 and 6, 1897. Henry L. Swain, M. D., Secretary. New York: D. Appleton & Company. 1898.

A Laboratory Text-Book of Pathology for the Use of Students and Practitioners of Medicine. By Horace J. Whitacre, B. S., M. D., Demonstrator of Pathology in the Medical College of Ohio. 121 illustrations. Price $1.50. Philadelphia: P. Blakiston, Son & Co. 1898.

Atlas and Essentials of Pathological Anatomy. By Professor O. Bollinger, M. D. Volume I. Duodecimo, pp. viii.—246. Illustrated. Price, $3.00. New York: William Wood & Co. 1898.

Atlas of Methods of Clinical Investigation, with an Epitomé of Clinical Diagnosis and of Special Pathology and Treatment of Internal Diseases. By Dr. Christfried, of Erlangen. Edited by Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Duodecimo, 259. Illustrated. Price, $3.00 net. Philadelphia: W. B. Saunders. 1898.

Sanitary Engineering. By Wm. Paul Gerhard, C. E., Consulting Engineer for Sunitary Works, Member of the American Public Health Association, etc. Duodecimo. New York: Published by the Author, 36 Union Square East. 1898.

The International Medical Annual and Practitioner's Index; A Work of Reference for Modern Practitioners. Sixteenth year. Price, $3.00. New York: E. B. Treat, 241-243 W. 24th street. 1898.

A Compendium of Insanity. By John B. Chapin, M. D., LL.D., Physician-in-Chief Pennsylvania Hospital for the Insane; late Phy-

sician-Superintendent of the Willard State Hospital, New York, etc. Duodecimo, 234 pages. Illustrated. Price, $1.25 net. Philadelphia: W. B. Saunders. 1898.

Literary Notes.

Dr. I. N. Love, editor of the *Medical Mirror*, has again become its sole owner and publisher. Dr. Love has secured the stock in the *Mirror* lately owned by Mr. C. R. H. Davis, and has associated with him Dr. H. R. Hall, anative of St. Louis, a graduate of the Washington University, of the Missouri Medical College and the City Hospital as assistant editor, who will be so thoroughly identified with the work as to be a very important factor. Dr. Hall recently served a term as assistant city physician and has such a fund of experience and general culture as to bespeak for him a pronounced success in practice and medical journalism.

We congratulate Dr. Love upon again securing absolute control of his own and bespeak for the *Mirror* a continuously increasing prosperity.

The *Southwestern Medical and Surgical Reporter*, of Fort Worth, and the *Texas Medical Practitioner*, of Dallas, have been absorbed by the *Texas Medical News*. The *News* has increased its size by sixteen pages and presents evidences of prosperous improvement, in which it has our best wishes.

Practical Therapeutics is the name of a little periodical published by H. K. Mulford Company, Philadelphia. It contains many items of professional interest.

The *Wisconsin Medical Recorder* is the title of a journal that appeared at the beginning of the year and is published at Janesville. It is edited by Dr. J. P. Thorne and is published by Hall and Thorne. The profession of Wisconsin deserves a first-class medical periodical.

The editorial and publication offices of the *North Carolina Medical Journal* have been removed from Wilmington to Winston, N. C.

Mathews's Medical Quarterly, now in the fifth year of its publication, announces that it will be printed hereafter as a monthly with

a change in name to the *Louisville Journal of Surgery and Medicine.* Wisdom and prosperity are both indicated in this announcement: wisdom, because personal names of journals are not desirable; and prosperity, because a change from a quarterly to a monthly indicates professional strength and financial solidity.

Polk's Medical and Surgical Register of the United States and Canada is now undergoing its fifth revision, and physicians who have not given their names to the canvassers are urged to send them to the publishers at once. Address R. L. Polk & Co., Detroit, Mich.

Items.

Wyeth's Effervescent Salt of Phosphate of Sodium is described in our advertising pages. The quality of this preparation differs in many essential points from its class as generally presented, and is believed to be superior in many requisite qualities. It is a light, porous granular salt completely, and readily soluble with full free effervescence, copiously eliminating carbonic acid gas. It acts as a mild, cooling diuretic, aperient and stomachic stimulant. The bottle itself is a unique improvement, including measure-glass and time-dose record. The package at once suggests convenience, and we find on a practical, personal test that it has unusual merit. Physicians should ask to see, or apply to the manufacturers, Jno. Wyeth & Bro., Philadelphia, for specimens of this pleasant and useful laxative preparation.

Dr. William P. Spratling, superintendent of the Craig Colony, Sonyea, has proposed the formation of a National association for the study of epilepsy and the care and treatment of epileptics. It appears to us unnecessary to multiply medical societies or to divide the specialties. The care and treatment of epileptics come within the province of psycho-neurological associations, which afford an ample field for the study and consideration of epilepsy.

The M. J. Breitenbach Company, agents for the sale of Gude's Pepto-mangan, has been the victim of misrepresentation. Taking advantage of the fact that there is a sign-advertising company in New York bearing the name of Gude, that displays its name in bold letters in public places, evil-disposed persons have hinted that the two were one and the same concern. The Breitenbach

company in a polite circular explains the whole matter to the profession. We invite attention to it at this time in the spirit of fairness and without solicitation of the company. Such practices are to be reprehended.

THE BEAUTIFUL ST. JOHN'S RIVER.—The Clyde Line, operating steamers between New York, Charleston and Jacksonville, Fla., in connection with Clyde's St. John's River Line, announce that on the 16th ult. they commenced running the well-known steamers between Jacksonville, Palatka, Sanford, Enterprise and intermediate points, leaving Jacksonville *daily* (except Saturdays). Returning these steamers leave the various landings daily (except Sundays) for Jacksonville, where connection is made with the Clyde Line steamers for the North. Heretofore the service on the St. John's River has been tri-weekly.

This interesting news will be hailed with delight by the numerous tourists and pleasure seekers who annually take in this delightful trip up the St. John's River. The beauties of the St. John's River have been heralded far and wide, and there are few Northerners who do not know of at least some of the attractions located on the banks of this river, the course of which is directed through the most tropical portion of Florida. In this section are located hundreds of boarding houses and hotels, where the choicest of Southern delicacies may be had.

The Clyde Line does the largest passenger business of any steamer line between New York and the South, and they have recently issued some very interesting literature, which they are sending out gratis to applicants. By addressing a communication to the Clyde Line, 5 Bowling Green, New York, our readers will in return be rewarded with some exceedingly attractive advertising matter regarding Southern resorts.

A UNIVERSITY day to be observed some time in June has been proposed by the University club of this city. It is believed that thus far no American city has made any effort to observe a special college day, and if the plans which were talked about at the University club are allowed to mature Buffalo will be the first city to originate the idea in America. The suggestion, which was made by the Rev. Lansing Van Schoonhoven, met with general approval. The Rev. Henry Elliott Mott and Mr. Henry H. Seymour, president of the club, spoke in favor of the plan. No definite arrangements

were made, but if the scheme materialises all college men in the city will be invited to assist in the celebration. The suggestion is a good one and we hope it will be put into practical working.

The New York Board of Trade and Transportation is making an investigation relating to the desirability of creating a national department of health and other methods of protecting public health as it affects interstate commerce. A special committee is conducting the inquiry on the following lines and invites suggestions, information and opinions thereon, such as they may be willing to make public, from experts and professional men having practical experience of sanitary affairs and from others having opinions on the subject.

1. Quarantine status and administration in foreign countries as furnishing precedents for the United States. (*a*) Border; (*b*) internal.

2. The present status of quarantine in the United States. (*a*) Border defense; (*b*) Interstate; (*c*) State and local.

3. The existing system of quarantine administration in the United States. (*a*) Cost; (*b*) Injury to and restrictions imposed on commerce and travel; (*c*) Security afforded.

4. Legislation needed for lessening injury to and restrictions on commerce and travel, and to afford greater security to the country. (*a*) Increase power of marine hospital service and how; or, (*b*) Create a national department of health; or, (*c*) Create a national department of commerce, with a bureau of health; or, (*d*) other suggestions.

5. The power of Congress under the Constitution to regulate matters affecting the health of the people—(*a*) National; (*b*) Interstate; (*c*) State and local.

Persons writing the committee are requested to affix to their names their professional letters, if any, and to address their communications to Mr. Silas M. Giddings, chairman, 203 Broadway, New York City.

The Chutmuck Special is the name given to one of the handsomest railway trains ever operated over the Missouri Pacific line. This train will be used by excursionists to the meeting of the American Medical Association to be held at Denver next June. Attention is invited to the advertisement of the company on page xxxiii. For information relating to the Chutmuck Special, address H. C. Townsend, general passenger agent, St. Louis, Mo.

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GANGRENE DUE TO ARTERIO-SCLEROSIS.[1]

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WHEN the committee on evening lectures kindly asked me to address you, I looked over the ground a little in order that I might select a subject of some practical value and it resulted in the choice of Gangrene produced by arterio-sclerosis. This form of gangrene is a particularly interesting pathological condition for the surgeon as well as for the general practitioner, for it is he who first sees these cases and upon his knowledge of the affection depends the welfare of the patient.

Gangrene from arterio-sclerosis is certainly more frequent in the male, usually occurring between the ages of sixty to seventy and, although extremely rare before forty, it has been observed in younger subjects. The social condition does not appear to have much if any influence, as it is met with in both rich and poor.

The lower limbs are more frequently the seat of the disease and in most cases it begins in the toes. It rarely develops in the hand or arm, although some few cases have been reported. Its appearance on the external ear or end of the nose is very exceptional.

The diseases and systemic intoxications which produce a pathological localisation in the arterial system, such as syphilis, rheumatism, gout, alcoholism, the infectious diseases, malaria and lead poisoning, are looked upon as playing an important part in the etiology of arterio-sclerosis and consequently this type of gangrene. Arterio-sclerosis begins as a chronic endarteritis and later the process of degeneration of the walls of the vessels favors arterial thrombosis, with resulting obliteration of the lumen of the vessel. In some

1. A lecture delivered at Tufts College Medical School, January 11, 1898.

cases, however, no history of any former infection or intoxication can be found, but such patients will usually give a family history of arterio-sclerosis and, as an illustration of this, I will relate a case that occurred in my practice a few years ago:

The patient was a lady of 65 years. Her father died at the age of 69 of dysentery. Her mother died at 55 of heart disease, death being instantaneous. The patient had one sister and two brothers. The sister died of apoplexy at 61 and both brothers died of the same affection in the fifties. Regarding the personal antecedents of the patient, all that is to be noted is that she had scarlet fever at the age of 10 and typhoid at 18. She was always subject to sick headaches. She gave birth to three children at term, five years' interval between each labor, all of which were perfectly normal. There were also two miscarriages, to which no cause could be attributed.

Other than the above-mentioned diseases, and a whooping cough at the age of 25 or 26, the patient had enjoyed excellent health up to September, 1887, when a cerebral embolus occurred, producing a right-sided paralysis, which was entirely recovered from at the end of three months. Again, in 1890, the patient complained of some slight trouble with her sight, and, at the same time, there was a little confusion in the speech, the tongue felt thick and articulation of words was difficult; but all these symptoms cleared up in a few weeks without any other troubles developing.

In the latter part of November, 1894, the patient began to suffer from an intense pain in the heel of the right foot. This pain became very severe and in a few weeks after the onset a small black patch appeared on the great toe, and shortly after this another one on the heel developed. At this time the family physician only applied compresses of some antiseptic solution and, as far as could be learned, nothing else was done. Little by little the gangrene increased and finally involved almost the entire foot. Pain was excessive and the patient was kept from sleeping unless relieved by opiates. By March, 1895, the condition was very bad and there was an elevation of the evening temperature.

I saw the patient for the first time on March 11, 1895, and found the following condition of affairs: The patient was suffering considerably, anorexia was almost complete and the thermometer registered 38.4° C. The right lower limb was in a state of edema, nearly up to the middle of the leg; the toes and the foot up to the malleoli were the seat of a dry gangrene with a very offensive odor. On examination of the arteries I could only detect pulsation at the popliteal space, and consequently it was supposed that the anterior and posterior tibial arteries were entirely obstructed, or nearly so.

With Dr. David W. Cheever, who had also seen the case in consultation, it was decided to remove the limb at the junction of the lower third with the middle third of the thigh. Recovery was uninterrupted and within a few weeks the patient was up and about on crutches. We made an examination of the amputated leg with the following result: The anterior and posterior tibial arteries were extremely thickened and in certain parts not more than a fine wire could be passed through their caliber. The femoral artery, at the point of amputation, presented atheromatous lesions with very thick and pliable chalky patches. The vessel was extremely rigid, although its caliber was not greatly diminished. These vascular lesions were also found in the smaller branches of the arteries of the foot.

Microscopical examination, after decalcification, showed that the walls of the vessels were greatly thinned and their external coat was invaded by a fibrous tissue proliferation. The muscular elements of the walls were much degenerated and the deep veins of the leg were obstructed to a certain extent by large fibrous clots. These clots were made up of red blood corpuscles, united together by a fibrous substance.

We did not see the patient again until November 10, 1896, at which time we were requested to examine the left leg, the following conditions being noted: The left foot was quite dry and the skin on the plantar surface was falling off in scales. The local temperature was sub-normal, being 36.2° C. Over the metatarsal joint, on the inner aspect of the foot, was a patch of hyperemia, the size of a silver dollar, in the center of which was a large suppurating focus covered by a thick dry scab. The same condition was noted on the external aspect of the foot, only the area covered by the hyperemia was a trifle smaller. A suppurating focus also existed in the center of this patch.

Pressure over the tibia gave rise to pitting as far up as the knee, although the size of the limb was in no way increased by the edema. The patient complained of considerable pain, although not intense. Believing that we were dealing with a commencing gangrene, due to the general atheromatous condition of the patient, it appeared possible that the progress of the disease might be perhaps checked by directly acting on the heart and blood-vessels, and the patient was placed on five-drop doses of tincture digitalis twice daily, and a teaspoonful of a 1-100 per cent. solution of nitro-glycerine, to be taken after each meal.

The limb was done up in absorbent cotton, kept in an elevated position, and the suppurating foci washed daily with a solution of creolin, after which they were freely covered with subgallate of bismuth. The result was that after six weeks the condition of affairs was decidedly improved; the scabs had fallen off and the suppurating foci had become completely healed, while the scaly condition of the skin remarked on the sole of the foot had entirely disappeared. The pain it was said vanished after a few days' treatment with the digitalis and nitro-glycerine and the patient was feeling in every way much better. The digitalis and nitro-glycerine were then discontinued and the patient placed on iodide of potassium in fifty centigram doses, twice daily. The iodide treatment was kept up for ten weeks and then the digitalis and nitro-glycerine were again resorted to, although the limb was in an apparently healthy state. From November, 1896, to February, 1897, there was no return of the local trouble, but on the 14th of February the patient died suddenly from what was to all appearances a cerebral hemorrhage.

I have reported this case at length in order to point out how much may be accomplished by medical treatment if instituted at an early date, and also because the case is a typical example of atheromatous gangrene.

Older writers generally divide gangrene into two varieties, the dry and the moist. This classification, which is entirely clinical, is still admitted today, and it is usually the dry form that is met with in atheromatous gangrene. The necrosed part is much smaller in size, but the limb keeps its general shape. The bony projections are

made more marked and likewise the depressions. The toes are flexed and dried and it is impossible for the patient to move them. After a time the parts become very hard, tough and resonant on percussion. The color of the affected area becomes darker until it is quite black. The dessication of the tissues is favored by the falling of the epidermis, which produces the formation of blisters in the beginning of the disease. Microscopically, we find a remarkable preservation of the anatomical structures, and we can easily recognise the muscular fibers, the connective and cartilaginous cells, as well as the blood corpuscles.

Now, if we are dealing with a case of moist gangrene, which is extremely infrequent, the tissues are macerated and edematous ; their consistency is soft and semi-fluid. The limb has a more or less blackish color, the skin which it covers is easily detached from the underlying tissues, as everything is infiltrated by a serous fluid. Microscopically we can no longer distinguish the various elements of the tissues, but we may find the presence of microörganisms, such as the bacterium thermo and the bacterium catenula, which are the most common organisms found in putrefying tissues.

The condition that is the most striking when we examine the arterial system of a patient with senile gangrene, is the presence of atheromatous foci, ulcerating patches and chalky degeneration. These lesions may be also met with in the large arteries as well as those of small and medium-size caliber, and which produces more or less obliteration. It is rare that the caliber of a vessel is entirely obstructed by an endarteritis and without the help of a thrombus, but the diminution in the caliber that this condition may produce is very considerable.

Forestier performed the autopsy of a man who had died from generalised infection, with a suppurating parotitis following a senile gangrene of the left foot, and he found considerable diminution in the diameter of all the arteries, due to the invasion by a considerable chalky deposit. In other cases which have been reported, in which the artery was entirely obstructed and reduced to the condition of a band of chalk, the interior of the vessel was entirely invaded by the disease.

We do not believe that it is necessary for the caliber of the vessels to be entirely obstructed in order to produce gangrene of the limb. All that is necessary is that there is a decrease sufficiently considerable to prevent the blood from irrigating the limb in sufficient quantity. Now, if a degeneration of the heart muscle be added to the lesion of the vessels, gangrene will certainly occur on account of the loss of force in the cardiac contraction.

Pitres believes that, in the first place, one of the principal arteries of the limb, which later on will be the seat of gangrene, becomes obliterated by a blood or fibrinous clot and then the vessel becomes the seat of an endarteritis. Collateral vessels then develop and it is by them only, or nearly so, that sufficient blood is distributed through the limb to nourish it. There is thus established between the blood carried into the limb and the necessaries of nourishment a kind of equilibrium, which fairly well carries out the nutrition of the limb.

Now, if there is the slightest event which disturbs this equilibrium, a progressive lesion of the principal artery, the flow of blood in the limb will be arrested and gangrene will then occur. Sometimes we meet with circular strictures in arteries of a gangrenous limb, and these strictures act by hindering the circulation in the corresponding extremities and thus diminish the quantity of blood which is necessary to maintain their life. A certain number of strictures will be found along the vessel and part of the blood, which the vessel should allow to pass if its caliber was normal, is forced through at the systole. Arterial tension is consequently lower from this fact. The same phenomena occurs at the point of each stricture, so that we can easily understand what considerable hindrance this form of endarteritis may produce in the circulation, and it is evident that this condition is pre-eminently favorable for the development of gangrene.

In a case reported by Forestier, the arteries of the diseased limbs were perfectly permeable and presented no apparent lesions. The patient was an old woman with a gangrene which had invaded both feet and legs almost symmetrically and which caused her death. The arteries of the lower limbs were found, at autopsy, to be nearly healthy, or at any rate they were not obliterated. On the other hand, the thoracic and abdominal aorta as well as both primary iliacs presented very marked lesions ; they were rough, nearly calcified and transformed into a rigid canal, whose caliber was extremely reduced in size and very irregular, so much so that a pencil could not be inserted into the vessels. In spite of the absence of lesions of the arteries of the limb it would appear that this case was certainly one of gangrene, due to sclerotic changes in the artery and, as a result of this, the vessels were narrowed and only allowed a small quantity of blood to flow through, although too insufficient to keep the lower limbs in good vital condition. Now, when the blood column had gotten through the narrowed vessels and had entered the arteries of normal size its tension was considerably diminished and the result would have been the same as

if a ligature had been loosely tied around the femoral vessels, thus allowing only a small quantity of blood to pass through.

The cause of gangrene from arterial sclerosis is consequently entirely due to more or less complete obstruction of the vessel. This obstruction, for that matter, does not depend on a pathological process always of the same nature, and may be due to a proliferation of the endothelium, especially in the small arteries; to chalky degeneration of the walls of the vessels; to a thrombosis; the lining membrane becoming unequal and rough, and thus favoring the deposit of fibrin along the walls; it may also be due to an embolus, a piece of chalky mass becoming detached from the wall in large vessel, as for example, the abdominal aorta, and being carried along until it suddenly obstructs an artery of smaller caliber.

The lesions of the arteries are not the only ones met with, and often the heart is the seat of endocarditis or myocarditis, both of which conditions simply increase the difficulty of the circulation.

Hypertrophy of the heart is also quite frequent, because the organ is obliged to fight against obstructions which prevent the free flow of the blood and is deprived of the action of elasticity of the vessels and consequently the heart becomes hypertrophied.

In a number of cases reported by Pitres and Dumaz the myocardium was extremely soft and yellow in color and in many others the hypertrophy of the organ have been noted. In some cases the mitral valves present marked induration at their base and occasionally the sigmoid valves present lesions of atheroma.

The microscopical lesions of the arteries present nothing of particular note in cases of gangrene and may be summed up briefly as follows: The lesions occur in the endothelial lining, the fibro-elastic layer of the external layer of the vessels, and are intimately bound together on account of the inflammation.

According to Martin, the first lesion occurs in an endarteritis of the vasa-vasorum; the proliferation of the endothelium, by producing more or less obstruction of the caliber of the vessel, prevents the arterial walls from receiving sufficient nourishment, and consequently the nutritive changes take place by imbibition in the external layer, which is the first to be the seat of the disease.

In the arteritis, due to syphilis, Martin considers that the changes are due to the infected blood which acts directly on the endothelium.

Chalky degeneration, which is so very frequent in old men, especially in the arteries of the limbs and brain, commences first, by a chronic endarteritis which commences in the internal layer already

hypertrophied, and thus endarteritis is microscopically characterised by a proliferation of the cells in the internal tunic, and by the formation of a corresponding intercellular substance similarly fibrinous in character, which soon gives the membrane a cartilaginous consistency. This cartilaginous tissue may develop regularly in the internal tunic in such a way as to diminish in every sense the caliber of the vessel, or it may develop more especially in certain places and form patches which project into the lumen of the vessel.

Following these lesions, the flow of the blood is slower in the arteries, which are the seat of the disease, and it may go to such an extent that a coagulation of blood takes place. The lesions in the arteries favors and produces the formation of thrombosis and these will have all the same tendency to form in the arteries which have the most active circulation. On account of the projections formed in the lumen of the vessel, the hematoblasts are arrested in their course and fibrin is soon deposited on them and thus a large number of red blood corpuscles are collected in its meshes and a clot is thus formed. When there is an arrest in the circulation the blood coagulates in a mass and we then have a clot, due to stasis. In all cases the permeability of the artery is forever lost.

In 1876 Friedlander described a variety of gangrene, whose symptoms were those of gangrene due to arterio-sclerosis, which differs by its pathological anatomy, having as a characteristic a considerable reduction in the size of the arterial system, and Panas has also reported a case of gangrene due to obliterating endarteritis. Other cases similar to the above have been reported by other observers.

There is between this gangrene by stricture of the arteries, and gangrene due to arterio-sclerosis of the vessels, more than one similar point, and if the arteries are neither hard nor irregular in shape, if there is no tendency to the formation of fibrous tissue, if the chalky degeneration is entirely wanting, and it is often the case in senile gangrene, we are dealing in both cases with gangrene from lesions of the arteries, because the vessels are no longer able to allow a sufficient quantity of blood to pass through them. The clinical symptoms which denote the presence of gangrene in both cases are exactly the same, and it is for this reason that we have mentioned this other form of production of gangrene.

Gangrene from arterio-sclerosis is very often preceded by prodromes, which occur several weeks, or sometimes several months or even a year, before the gangrene of the tissues. Generally pain is the first symptom which occurs and has no particular characteristic

which would put the surgeon in the way of making a correct diagnosis. The pain always occurs when there is commencing gangrene from arterial obliteration and is present long before gangrene makes its appearance.

François mentions the case of a patient who noticed pain in his leg when he over-did walking, and this occurred two years before the appearance of gangrene. Pitres mentions the case of a patient eighty-two years old with a gangrene of the foot, and who had suffered for two years previously from pain in the leg. Another case is mentioned by Barth, who had painful symptoms in the right leg four years before the gangrene appeared. In a large number of cases the pain occurred some time beforehand, but in others it is within a few months before the appearance of the local lesions. This pain is generally produced by fatigue, and cold also favors it; later on even moderate walking will produce it and soon it occurs without any cause, even during rest in bed.

The pain is probably due to obliterating arteritis of the vasa nervorum and this neuritis, far from being primary, is probably consecutive to arteritis of the vasa nervorum. Tingling and a heavy feeling in the limbs are also apparent signs of gangrene, as is also the sensation of cold. Examination of the organs of circulation is important, and it will be found that the superficial vessels are hard, knotty, and have a tense feel when the finger is applied to them. Pulsation will be also felt with difficulty or may be absent.

There is hypertrophy of the heart on account of the difficulty of circulation in the vessels and consequently cardiac dulness is increased; soon symptoms appear which can no longer leave any doubt as to the true nature of the disease. At the same time that the pain and heavy sensation increases, the temperature will suddenly fall in a marked manner and absence of pulsation at the root of the diseased limb; in the toes, on the side of the nail or in the interdigital space will be seen a livid plaque of a reddish color, surrounded by disseminated venous circulation. Soon after a blister appears, which contains a fetid serous fluid, and from this time on the phenomena characteristic of gangrene appear. The lowering of the temperature of the diseased limb appears little by little as the decrease of pulsation in the vessels become more and more marked, and although the gangrene has taken place and takes on an essential chronic progress, this lowering of the temperature is very manifest and is easily noticed even by comparing the surface temperature of both legs with the hand. In one case reported the local temperature was 31.2° on the healthy limb and 27.8° for the diseased limb.

Recently another case has been mentioned by Forestier in which he was able to find a difference of more than 2° centigrade between the diseased limb and the healthy one, although in this case it was one of slowly progressing gangrene and at the beginning of the disease. The symptom of painful anesthesia is frequently met with. The patient has intolerable pains in the leg and foot which prevent sleep; nevertheless when pressure is made over the toes he does not feel it and likewise hot poultices when applied to the leg to bring back circulation.

With this loss of sensibility in the part situated below the point of stricture in the artery we may sometimes note a certain degree of hyperesthesia in the region situated above; sometimes the anesthesia is only superficial and when the limb is pricked deeply a dull pain may be complained of by the patient. When the gangrene has extended high up on the foot, or the beginning of the leg, it stops progressing and a line of demarcation occurs between the dead and the living tissues. This line is in the first place shown by a red inflammatory line and soon a process of exudation occurs. The skin becomes ulcerated and a sulcus becomes marked little by little. The lower border of this sulcus is made up of gangrenous tissue, while the other upper border is made up of healthy or nearly healthy tissues because their vitality is extremely poor at this point. Now, this furrow continues to become deeper and deeper, and there is a true absorption of that part of the eschar which is in contact with it and the muscles and aponeuroses and the bone itself is soon divided by this process. This spontaneous amputation takes several months to be completed if an operation is not performed.

The local phenomena which have just been described are not the only ones which occur in this form of gangrene. A large part should be given to the general symptoms because they are frequent and of considerable gravity. The pain is often sufficiently sharp to produce a restlessness, insomnia, and frequently there is delirium with fever; the patient presents extreme prostration, there is anorexia, a profuse diarrhea occurs, fever declares itself and the patient is quickly carried off by a true septicemic process. All these symptoms are due without doubt to the absorption into the economy of a part of the tissues and liquids from the focus of the gangrene and the autotoxemia is all the more serious because it occurs in elderly people having a generalised arterial sclerosis, and consequently whose kidneys are insufficient and whose organism no longer can defend itself sufficiently against toxemia or the invading microörganisms; consequently it may be said

that the patient can die of his gangrene without any other complication occurring.

Senile gangrene usually follows a slow and chronic progress, especially when we are dealing with the dry form. The local points of gangrene remain for several days or months without progressing. They become limited in the first place on one toe and then later on invade another, and thus little by little they appear over the entire hand, foot or leg, or the fore-arm, elbow or the knee. At other times the progress is more rapid, and the gangrene occurs at once, the patient suffering only one or two days, and at the same time the temperature becomes lower, movement is very painful, the leg takes on a bluish livid color, the epidermis becomes raised up as in a putrefied limb; in other words, a rapid type of gangrene has declared itself, which by its manifestations is very similar to a gangrene due to embolus.

When we are dealing with a case of gangrene in a patient in which no other local manifestation has as yet occurred, the diagnosis is extremely difficult and often impossible to establish. In many cases rheumatism has been thought to be present, on account of the pain, and especially when this is localised over a joint. When the pain takes on a shooting type of burning and heat, it may be taken for a symptom of a lesion of the spinal cord. In the same way the symptoms of paralysis, which have been noted in certain cases, and which present their greatest intensity immediately in the beginning, have also been taken for paralysis of central origin.

When the gangrene has become marked, and it has become manifest by the local lesions, the diagnosis can be made. No one would mistake a patch of gangrene for ecchymosis, and it would also not be taken for a periarthritic ulcer, if it commences over the big toe, the border of the foot or the heel. This is only mentioned in order to prevent any error occurring. Now, when the diagnosis of gangrene is made, the next consideration is to know with what type we are dealing. If it is one following directly a wound or a contusion, burn or freezing of the limb, the patient will give us the necessary information on this subject. If it is a gangrene due to some internal cause its nature becomes far more difficult and delicate to determine. Inquiries of the patient regarding the possible history of infection should always be made in the first place and the heart should be carefully examined. The urine must be examined to ascertain if it contain albumen and especially sugar, which, if it is present, will allow us to make a diagnosis of diabetic gangrene. The sudden

appearance of this affection, announced by pain, sudden lowering of the temperature and ischemia of the limb would naturally point to an embolus as a cause.

The diagnosis of gangrene due to a generalised atheroma is very difficult. It is true that in this case the pain is, in most instances, less severe, but what will lead us to suppose that we are dealing with this form of gangrene is when the pulsation of the arteries can no longer be found, and, also, the vessel itself will escape being felt by the exploring fingers. Clinically, it is often very difficult to make an exact diagnosis, because the edema will often prevent direct examination of the arteries of the diseased limb, and in this case an examination of the superficial vessels must be made, such as the temporal, in order to ascertain their condition.

The age of the patient has also a certain importance as regards the diagnosis, but it must be remembered that gangrene, due to an obliterating endarteritis, often develops in people who are not advanced in age. Now, we will suppose that our diagnosis is made and that gangrene has commenced to make its appearance. What should be the measures of treatment? Should we delay operation or, on the contrary, would it be better to interfere immediately? If we are dealing with a well-limited gangrene and if the neighboring tissues are in a normal condition; if the arteries are still sufficiently elastic, so that their pulsation can be felt; if on the other hand the patient is still strong, with a heart in good condition without myocarditis: if nothing abnormal is found in the urine—in this case no hesitation is permitted, but we must operate.

An operation is to be more fully considered if, at a certain time,—for example, when elimination takes place,—suppuration with symptoms of infection occur. But if the gangrene takes on a serpiginous character, and if gangrenous points appear in the midst of healthy tissues, and if the pathological process has any tendency to become limited, if the pulsation of the arteries cannot be felt, and if the patient is in a cachectic condition, with a heart on the point of failing, and the kidneys doing their work in a defective way—in this case we must abstain from operating. We should be reserved in the prognosis and wait a while before making up our minds if it is still impossible to foresee, even approximately, at what point the gangrene will stop, if the limb presents an ecchymotic aspect, if it is markedly colder than its fellow limb, as well as if it is painful and useless. The prognosis of atheromatous gangrene is always extremely serious, because it often produces very extensive mutilation of the limb, frequently relapses,

and is often in itself a cause of death, as we have already pointed out.

We must also bear in mind that complications may arise which hasten the progress of events. These complications are of two kinds: The first are due to the poisoning of the organism, and is a direct consequence of the gangrene. The other complications are due to arterio-sclerosis, and are only manifestations of this degeneration, as is the gangrene itself.

Septicemia is the most dangerous as well as the most frequent complication and as an illustration of this I would mention a case reported by Mendel of a man of sixty-seven years, presenting a senile gangrene. The patient died of septicemia in a few days and the obliterating phlebitis in the tibial vein, the fluid condition of the blood, as well as the great softness of the spleen, left no doubt as to the anatomical diagnosis.

We shall not say anything regarding the lesions presented in the arteries in cases of advanced atheroma, but I would mention the fact that in these cases of septicemia the liver and spleen show signs of an infectious process. In other cases, instead of a general infection occurring at once, a senile gangrene may produce a lymphangitis and abscesses which develop in healthy tissue some distance from the gangrene itself. Pneumonia and broncho pneumonia have also been mentioned as complications, as well as phlebitis and embolus. Other complications that may be mentioned are nephritis, myocarditis and cerebral hemorrhage.

Regarding the treatment there is little to be said, but the first important and one of the essential conditions of success is to keep the patient's strength, and for this the free administration of quinine is of first importance; as is well known, this drug is both a tonic and an antiseptic, and its action in these cases is quite manifest.

In cases where there is a tendency to gangrene, as in the case taken as the text of this lecture, it may be accomplished by medical treatment. In the first place the judicious use of nitro-glycerine, combined with an infusion of digitalis, may act like a charm and prevent gangrene from occurring for at least a certain length of time. The diet should be nutritious and easily digested and the patient should be kept as quiet as possible. Besides this the suspected limb should be maintained elevated in a horizontal position and enveloped in a thick layer of absorbent cotton in order to maintain a suitable temperature. Amputation is indicated when the gangrene is pronounced, but on the condition that the abdominal organs, heart and

lungs are in good condition, as well as the general strength of the patient.

To sum up we may say that there are three manners of interfering. In the first place we have what we call "tardy interference," which is simply a section of the bone and evening off of the stump after the gangrene has ceased to progress and the line of demarcation has become marked. We call it a "secondary operation" one in which the demarcation has become distinct, and then we amputate high up above the lesion, while an immediate operation is that one which is performed as soon as the symptoms of gangrene have made their appearance and are certain.

It would be impossible to discuss fully the proper treatment of atheromatous gangrene, because each case is a law unto itself, and we can only be governed by the actual conditions presented in a given case, when we should take into consideration the various pathological and symptomatic phenomena present and act accordingly.

871 BEACON STREET.

A CASE OF APPENDICITIS WITH UNUSUAL SEQUELAE[1]

By NATHAN JACOBSON, M. D., Syracuse, N. Y.,
Professor of clinical surgery in Medical Department of Syracuse University; surgeon to St. Joseph's Hospital, Syracuse, N. Y.

LET me present, as concisely as I can, the surgical history of a patient who has been under my observation since January 16, 1897:

His occupation had been that of a farmer. He is unmarried; 28 years of age. On September 12, 1896, at the request of his physician, Dr. Badgeley, he was operated upon at his home, at Fayetteville, N. Y., by the late Dr. Magee, of Syracuse, assisted by Dr. Elsner. I am indebted to the latter for the notes of that operation. At this time, the sixth day of his sickness, they found his features pinched, his skin bluish-red, his extremities cold, he hiccoughed constantly, vomited a greenish-yellow fluid. The abdomen was enormously distended and tympanitic. A large area of flatness occupied the right iliac and hypogastric regions. His temperature was 103°; pulse, 140; respirations, 19, reduced in frequency because of morphia narcosis. Dr. Magee made an incision along the right semilunar line. Upon reaching the peritoneal cavity the intestines were found glued together with a yellowish-gray exudate; the cecum and appendix seemed gangrenous. The appendix could be but partially seen. One quart of fetid pus escaped. The apparently gangrenous area in the neighborhood of the appendix was about three by four inches. Gauze was carried in all directions and several yards of it used. The operation lasted an hour and a half; the patient hiccoughed throughout the entire time.

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

We will all admit it to be surprising that so advanced a condition of septic invasion should have been relieved by a surgical measure, and that there was little at the time to warrant the prediction that the patient could recover. He remained under the care of Drs. Badgeley and Magee until the latter's death, October 29, 1896. From this date until he saw me, which, as stated, was January 16th, the local physician cared for him. When presented to me there was a sinus on the right side. A probe introduced into it recognised at once the presence of several stony hard masses. The sinus led into the right iliac fossa. Two weeks prior he had had some fever and a swelling was discovered in the left iliac fossa, just above Poupart's ligament. Here a tumor was present of perhaps the size of a hen's egg. An attempted examination per rectum caused so much pain that it was not completed. On January 18th a tupelo tent was placed in the sinus. After dilatation was effected a concretion was found lying about two inches from the surface and removed with the aid of a Volkman spoon. It had a circumference of 27 mm. and was 1½ cm. in length. This was done painlessly under cocaine.

After this, for a few days, the morning temperature remained normal, but there was a slight evening rise. On January 23, 1897, the temperature being 101½°, I made, under ether, an incision 2½ inches in length, parallel with Poupart's ligament, over the swelling on the left side. The hard mass was found to be made up of infiltrated tissue with its center broken down and containing a quantity of pus. It was freely curetted with a Volkman spoon. A probe could be carried into it downward and backward, apparently traveling close to the inner surface of the pelvis for a distance of about eight inches. Gauze was introduced into its depth and the wound partly closed. On the right side the sinus was further opened and an attempt made to reach its bottom, and although the probe entered very deeply there could be no certainty as to its depth. This operation disposed of the high temperature for a time. Only occasionally did the thermometer register 100°. Another fecal concretion was removed February 8, 1897. No improvement seemed to appear in the right-sided sinus, although the abscess cavity in the left side healed quite promptly.

During the early days of March, 1897, there was a further increase of temperature; a free discharge of pus persistently appeared on the right side, giving evidence of deeper disturbance. All of this time the abscess on the left side steadily healed. The active suppurating condition on the right side demanded further attention. Under ether,

March 4, 1897, I made an incision above the opening of the sinus, carrying it down to and encircling its mouth and extending it well toward the groin. Entering the abdominal cavity above the sinus, guided by my index finger, I freed the adhesions, separated the skin, protected the abdominal cavity by pads and ultimately reached the suppurating area below. The mouth of the sinus was, of course, packed temporarily with a strip of iodoform gauze. A small stream of pus was seen to find its way into the abscess cavity from above. Following this up I entered a large post-cecal abscess filled with thick yellow pus. This was likewise freely opened and cleansed. Freeing the cecum I was soon able to reach the appendix. This we removed, closing over the stump with a cuff of serous membrane. Gauze drainage was generously used. Some was carried quite deeply. Having curetted away all granulation tissue the wound was closed in part.

Everything progressed favorably with him until the third day after the operation, when he presented marked distension, great abdominal distress, dry tongue and bad facial expression; pulse ranged between 110 and 120; the cecum was being forced out of the wound. He continued very sick throughout the night. The next morning he was given epsom salts, which only precipitated the vomiting of a great deal of bilious matter. There was no fecal discharge from the bowels, but a great deal of gas and mucus passed from him. The greatest distension was in the hypogastric, umbilical and right iliac regions. About this time a small quantity of pus was noticed forcing its way up out of the granulations from the wound on the left side. This wound had been as stated, all but healed. With the aid of a narrow bladed curved forceps I succeeded in carrying a drainage-tube into the sinus on the left side for a distance of about nine inches and immediately there was a free discharge of pus.

The patient soon improved. The symptoms of intestinal obstruction disappeared. His pulse became firm, reduced to 100; temperature to normal; bowels moved and general improvement was apparent. The abdomen became flat; distension not so marked; tongue was moist; and the stomach no longer made itself unpleasantly manifest. This improvement continued for about two weeks. The cecum, which from the very beginning of his sickness was extensively involved, occasioned each day more difficulty. The hospital interne who made the dressings complained to me of his fear that the gut would ultimately become perforated at this point.

On the 28th day of March I was informed by the interne that a perforation had occurred. The opening was very small and I hoped

that we might be able to close it with Lembert suture, under cocaine. This was attempted, but on April 2d it again gave way and a few days later there was quite a free fecal discharge from the wound. Throughout the month of April, however, while some fecal masses were daily discharged through the fecal fistula, most of his feces were expelled per rectum.

The sinus on the left side steadily discharged less, and by May 1st was entirely healed. During the month of May the fecal fistula became gradually converted into an artificial anus and from this time forward there was very little discharge by the natural channel. The post-cecal abscess cavity filled in very slowly and only partially. During the summer months, being out of doors and possessing a good appetite, he gained in strength and health. The artificial anus was guarded by a receptacle. Once during the month of June there appeared some fever, with its ordinary accompanying manifestations, together with a large firm area in the center of the abdomen just below the umbilicus. It was quite immovable and very tender. With the aid of high enemata, cathartics and free irrigation of the wound cavity, this cleared up after a few weeks.

Returning from my vacation early in September, I found him in good physical condition, but with his artificial anus still the point of exit of his entire fecal discharge. The mucous membrane was strongly everted and the opening into the cecum was large enough to receive two fingers.

On the 19th of September, a little more than a year after his primary operation, I undertook what I believe will be the final operation for the relief of his condition. The necessary preparations, including thorough emptying of the intestinal tract completed, I made an incision, beginning about three inches above the artificial anus, entering the abdomen at this point, cutting down to and around the artificial anus, and downward toward the groin. Protecting the peritoneal cavity as I went, by gauze pads, I gradually severed the adherent intestine along its inner line of attachment. The difficulty came in separating the adhesions to its outer surface. These were so firm and the cecal wall so degenerated that at one point the bowel was badly torn open, so that we had not only the preëxisting opening, but another fully two inches in length. All of the ragged, thickened, friable portion of the cecum was cut away and the two wounds closed by double Lembert sutures. The size of the gut was greatly reduced. The ileo-cecal opening seemed quite small and the structures in its neighborhood were deeply

infiltrated. The gut was securely closed, freed from all of its adhesions, and the post-cecal abscess cavity packed with gauze and the wound closed in part. At this as well as at all of his previous operations the anesthetic gave us a great deal of trouble. At each the patient stopped breathing and required artificial respiration to restore him. The reactionary temperature following this operation was 101°. On the second day it was normal, his pulse fell below 90, and both have remained so since. Some of the discharge during the first week had a very suspicious odor, probably from the osmosis of gases, but at no time was there any fecal leakage.

As is my practice, the wound has been closed little by little by the introduction of secondary sutures, until we have now a wound of about two-thirds of an inch in length, while in depth the post-cecal space is all but filled, and there is not the slightest suggestion of the projection of the intestines into sight. The abdomen has remained flat throughout—there has been scarcely any bloating. Bowels move freely and sufficiently. He sits up; eats what he pleases. There is no further discharge from the wound, and the period of his ultimate recovery can now be predicted to be close at hand.

The case presents several very interesting points: (1) The extensive general peritonitis, with the accompanying profound sepsis, would hardly have warranted a prediction of even possible recovery after the primary operation; (2) When four months after the occurrence of the appendicitis he became my patient, I hoped that the large fecal concretion in the sinus was alone responsible for its unhealed condition. The accompanying left-sided abscess was first believed to be due to a localised infection growing out of the widespread general peritonitis. Not until the operation done for the removal of the appendix, and the finding at that time of a large post-cecal abscess, did connection between the suppurating conditions of the two sides suggest itself to me. But, when I cut off the exit of pus on the right side by my gauze packing, and thereby forced any purulent collection in its depth to find another outlet, I unwittingly reopened the communication with the abscess on the left and proved beyond question the existence of a communicating sinus, extending across the whole length of the retroperitoneal space.

I have gone over the surgical literature of recent years quite carefully and must confess that I have not found another case presenting an exactly similar condition. I have seen appendicular abscesses allowed to open spontaneously, in which the pus has found an exit through the umbilicus, the scrotum, and several in the lumbar region,

strikingly simulating perinephritic abscess. I know there are cases on record where the pus, of appendicular origin, has found a way through the sub-diaphragmatic space, broken into the lung and been expectorated. I have found another case recorded where the transit of pus was through the abdominal wall and thus out on the left side. But none quite like my case. (3) While it is no unusual thing to meet with a fecal discharge, because of perforation after operation for appendicular affections, the formation of an artificial anus is unusual. As we are told by Dr. Elsner that at the primary operation the cecum was all but gangrenous, we can readily appreciate its very friable condition and the little vitality it manifested later on. Fortunately there is plenty of tissue to spare in the cecum, and one can cut away generous strips from it without fear. The attempt to close the fecal fistula without separating the gut freely was, as might have been expected, futile. But now, after more than a year's sickness and a number of operative procedures, we have finally reached a happy termination in what has been to me a case of appendicitis with most unusual sequelæ.

430 South Salina Street.

SOME POPULAR ERRORS IN THE TREATMENT OF NERVOUS PROSTRATION.[1]

By B. C. LOVELAND, M. D., Clifton Springs.

FIRST, in reference to diagnosis. Apparently nearly all the functional neuroses characterised by deviations from the normal sensations and an inability, either real or imaginary, to do the usual quota of physical or mental work, are called neurasthenia or nervous prostration. I have seen cases called neurasthenia by prominent physicians when the physical condition of the patient was much more robust than that of the physician who made the diagnosis and the patient, too, was expending as much nervous energy, though foolishly, as the physician.

If neurasthenia is anything, it is a condition of weak nerves and weakness in anything implies an inability to perform its function. One so-called neurasthenic patient who complained sorely of inability to concentrate his mind and do his usual daily work wrote me twenty pages of well-written and consecutive description of his condition, as

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

he termed it, telling all about his feelings to the very minutest detail and never once repeated himself. Now, such a patient has manifestly power for mental work and his trouble is not a lack of nerve power, neurasthenia, but a perversion of nerve power, hysteria.

An engine with all its parts in order and one hundred pounds of steam on has power and if the engineer turns the steam into the proper channel useful force will be exerted, *i. e.*, work will be done; if, however, he opens the escape valve he may allow all the steam to escape and he will have no power for work until a new head of steam has accumulated. A similar state of affairs was taking place with the so-called neurasthenic referred to. Nature is at work constantly to give him a reserve power, as one might say, and he is just as constantly wasting the energy given in self-study, worry and the like, thus throwing it away when it might exactly as well be put to some useful purpose, and that failure to properly direct his energy, not a lack of energy, constitutes his disease, if disease it may be called.

Another condition often confounded with neurasthenia is simple nervous exhaustion. Muscular exhaustion may be caused by muscular overstrain and in the same manner nervous exhaustion may be produced, but the amount of exercise, either muscular or nervous, required to produce exhaustion in either of the tissues respectively, cannot be determined in the abstract, as it varies with the physiological capital of the individual. Neurasthenia may be natural, *i. e.*, hereditary, or congenital, or it may be acquired. The natural neurasthenic is much more liable to nervous exhaustion than the person endowed with the ordinary amount of nervous capital, though nervous exhaustion may occur in the neurasthenic of either the natural or acquired variety, or in the person of normal endowment. This exhaustion, mistaken for neurasthenia, may bring great disaster to the patient.

The errors in treatment to which I would call attention are mainly due to the errors in diagnosis just mentioned, and consist principally in either filling the patient with tonics or stimulants and pushing him on to work, or allowing him to work on this false basis when he should have rest and nourishment; or putting him on a rest cure when he should have his brain cleared of some erroneous ideas and be kept at work.

The first class of cases referred to in this paper need to have their nerve force, which is being wasted, turned back into its proper channel. To that end they need some thoroughly competent physician to show them their physiological capital, prove to them that they

have power and that their trouble consists not in a lack of power, as they suppose, but in a perversion of power. This task accomplished, they should be set at work at something, using work as their greatest safeguard, while the effort is still continued to efface from their minds the idea that they are neurasthenics. A man may be weaker than he thinks he is, but for practical purposes he is never stronger than he thinks he is. It is a frequent thing for me to see such patients who have been told that they had neurasthenia and must take a year off from business and perhaps take a trip to Europe and not even read or write letters. They usually accept the decision as coming from authority and become resigned to it as they would to typhoid fever, but when the year is past and they find that they are less able than at its beginning to do the ordinary mental work, whoever then has the task of setting them right has also the habit of thought and feeling of the whole year to overcome, for the self-study thus induced has become a great fascination. Numerous instances of various methods of handling this condition could be quoted, but that is not the object of this paper.

The same mistake is often made in cases of simple nervous exhaustion and the patient is either sent away for a hard trip from which he returns more exhausted or put to bed for from three to six weeks. In either case, if he has any tendency to hysteria or hypochondriasis, he has ample time to become a confirmed invalid by being deprived of his usual occupation, thus giving him all his time to devote to studying over his ailments. I do not mean to assail the "rest cure" so-called, or any other useful treatment, but to show how from a faulty application of the cure or method in properly selected cases, or its application to cases unsuited for it, it may be the means of developing extreme hysteria or at times melancholy. The convalescent or getting-up stage of the rest cure treatment deserves especial care and often more attention from the physician than any other time in the progress of the case.

The writer has had the difficult task, some score or more of times, of endeavoring to get a patient on his feet again after from one to four years or more of almost helpless invalidism, who owed a large share of his trouble to the popular treatment just mentioned, but which was not suited to the individual. The patient had nervous exhaustion, was told that he must lay off every thought of work and go to bed for a few weeks. He went to bed, hopeful that when the weeks were past and the disease had run its course he would get up well. He perhaps objected and was told that, although he did not now see how he

could go to bed, in a week or two he would not hardly know how to get up, when once he had become relaxed. He found it even so. When the time had passed he found the getting up painful, became anxious and instead of setting his mind at rest by thinking that the pain was only caused by resuming activity in unused muscles, which was the truth, he thought, "Well! I must have been much worse than I thought, or even the doctor told me. Perhaps he was afraid to tell me for fear of discouraging me." The idea was not eradicated from his mind, he became hypochondriacal and thought if he was still so weak and sore on exertion he must be in need of more rest. He went to bed again for another rest, or, what was not much better, dragged about a miserable existence, walking as though he were treading on eggs and did not wish to break them, and fearing to write or speak above a whisper or low undertone, lest he should overtax his nerves. This state of affairs may last indefinitely and is at best very hard to break up and bring the patient back to anything like a normal individual. This is no ideal representation, but true to life, as it has come under my observation. Such a case was manifestly not a suitable one for rest cure,—or else the physician failed at the particular point alluded to as of special importance, the getting-up stage,—and was either hysteria to begin with, or nervous exhaustion which was turned into hysteria by being allowed to follow his own mental drift, and having nothing else to occupy his attention and thought than his own sensations.

In contradistinction to this, another case may show how a person with similar tendencies, if taken in time, may be soon restored to usefulness: A clergyman, 36 years old, of large physique and healthy appearance, consulted me March, 1897. He complained of insomnia, distressing pressure in his head, pain in the back of the neck upon slight exertion, inability to concentrate his mind sufficiently to write his sermons and had especially bad nights after his Sunday efforts. He gave a history of two previous attacks of nervous prostration, one during his college course, which he said required him to lay off all mental work for a year or more and in which he was told he narrowly escaped brain fever. The other attack occurred three years before he consulted me and he lay by nearly a year at that time, spending his time on a farm with friends, where he enjoyed company, but had no responsibility. His present trouble began some months previous to the time I saw him and he had hoped to avert a repetition of his former experiences by taking a smaller church and using old material for his sermons for a time. But he had found the

work too much for him and after taking a month's rest and trying again with no better result, he came to me for advice about giving up his church for six months or indefinitely and taking a long trip or going south for some months. His physical condition was carefully investigated, including the examination of his blood and urine and the opinion reached that his feeling of exhaustion and also his insomnia, pressure in the head and other troublesome symptoms, were due in part to a deficient elimination and in part to the memory of what he had suffered during his previous illnesses. After great care in the way of explanation and not without argument, which nearly ended in change of physicians, for his mind was firmly set in the belief that his former experiences were to be repeated, he came to see his case as I did and accepted the hygienic and dietary regulations directed. These included the free use of water, moderate use of meat, abstinence from tea, coffee and sweets and systematic out-door exercise. After about four weeks of this régime he came around one day and thanked me for my persistence in urging him the way I did against his own judgment and to say that he was convinced, in spite of the humiliation, that he had been suffering with hysteria instead of neurasthenia as he had supposed. He resumed his work and is still keeping well. No medicine was given, as he needed none, although he had been taking medicine of various sorts before consulting me.

Here it is perhaps well to note the uselessness of trying to keep such a patient going on tonics or stimulants; and also to state that as the condition we call fatigue is due to a toxic condition of the blood, brought about by the cell destruction, or tissue change, accomplished during exercise, either physical or mental, and we become rested when we have had time to eliminate the effete material, so the condition of habitual fatigue—that tired feeling—or that condition in which a person becomes fatigued upon the slightest exertion, is frequently not from the loss of strength or power, but from such insufficiency in the elimination that it only requires an exceedingly small amount of broken-down tissue products to be added to induce such a condition of saturation of the system as to produce the feeling of fatigue, while at the same time the patient be really strong. Such was the state of affairs with the last case described and it is a condition often overlooked. When the average specific gravity of the urine is over 1.024 and the blood presents 10 or 15 per cent. of concentration above the average, even if there are no signs of organic disease of kidneys or other organs, the condition deserves attention, which at that time may avert serious trouble.

In the way of a closing suggestion, it may be said that the laws of food ingestion and elimination, exercise and rest, which govern the development of a strong muscular system, are akin to, if not identical with, the laws which govern the development of a strong nervous system. And the same logic which will apply to building up a strong muscular system from an exhausted or wasted one will also apply to the restoration of a weak nervous system or a neurasthenic. We would not think of more than a few days of complete muscular rest after muscular exhaustion, for instance, and then would advise carefully graduated exercise. The same kind of management may be applied to the person whose nervous system has become exhausted from an over-strain and it will not open the way for the development of hysteria and hypochondriasis. The patient will not empty his mind of every thought that touches on his business or profession and let it remain a vacuum, but will occupy it with something, and our great problem is to furnish such a patient some occupation which will do him good and not harm.

DISCUSSION.

Dr. MANN, of Buffalo: I do not think Dr. Loveland's paper ought to pass without a word, because it seems to me to be exceedingly important. I believe there are a great many of these cases, such as the doctor describes, that are treated entirely wrong. A great many cases come to me for operation, even for serious operations, where there is no necessity of any operation at all, where the perverted nerve functions are due to something entirely different from a local, say, uterine or pelvic condition, but where they are due more to the condition that the doctor describes than to anything else. I believe that this auto-intoxication—the doctor did not use the term, but that is the condition which he describes—that this auto-intoxication which the doctor mentions is one of the most common causes of this state which we find so frequently, which we find more commonly among women than we do among men. We can find out very quickly whether this is the case or not. The test of the urine which the doctor gave will tell the story very quickly. In my private hospital a while ago I took twenty cases, as they came into the hospital, of women suffering from various pelvic disorders and put their urine to careful examination, a twenty-four hours' sample, and tested it. I found that of twenty women the average amount of urine passed in twenty-four hours was fifteen ounces; in some of them it was down as low as four ounces. They didn't have Bright's disease; they didn't have suppression of the urine exactly; but they had what we might call a constipation of the kidneys, a condition which is just about the same as that which we find in the bowels. Their bowels were constipated, too. I found it was utterly impossible to do anything with them. I might take their insides out, sew them up and do all sorts of things with them and they would not be one bit better until I had got their eliminations into proper condition, and this consists in getting their skin to act, by hot-air baths and so on, and getting the kidneys to act, because the kidneys will act after the

skin has relieved them somewhat of the overburden of poison which is put upon them. They are tired out by the amount that is brought to them. They cannot act. If you get rid of a certain amount of it by the skin they will act again; and by making them drink large quantities of water. Some of them wouldn't drink water at all; had to make them take a teaspoonful at a time. One woman said water made her sick and she couldn't take it. I told her she could go home until she could take water. One woman laid and cried three days because I told her she had to take water, teaspoonful at a time. She ended by getting well, drinking about two quarts a day. Elimination will not go on except it has something to eliminate it with and water washes out the system, helps the kidneys, helps the bowels to do their work properly. Of course, we must look into the other points to see that there is no local irritation, which is the starting point. There may be some eye trouble, displaced kidney, misplaced uterus; there may be one of a dozen different things which is the starting point of the trouble and which should be corrected, but you will do nothing towards the relief of the patient until you get their eliminative organs in proper working order.

The President, Dr. ANGELL, of Rochester: Any further discussion on this subject? I would like to emphasize, if I may, the remarks made by Dr. Mann in addition to the paper by Dr. Loveland, and I would like to say that I believe so largely in the power of thorough elimination in relieving many of these nervous symptoms that in perhaps 50 per cent., perhaps 75 per cent., of the cases of functional nervous disorder that come under my observation, I am constantly using water in large measures and also resorting to the use of salicylate of sodium or salicylates in some form, which is one of the best means we have of increasing elimination of the urates or uric acid, and I have obtained even better results by this method of treatment than by treating them symptomatologically and putting them to bed and giving them rest. Of course, in some cases we have to do that. I simply call attention to the bad influence of subjective attention. I mentioned that this morning in my paper, but I cannot emphasize it too much. If you can win people from thinking about themselves and their physical processes, you have not only done that patient good for the time being, but you have given him a liberal education.

Dr. WEIGEL, of Rochester: In line with this same subject, Dr. Loveland's paper, I want to call attention to certain classes of cases which are exceedingly common, and that is nervous breakdown in school children, a class of cases which is increasing because our school-work makes such demands, particularly upon the girls. We hardly stop to realise that when a girl reaches the age of twelve or fifteen years that the whole constitution is undergoing a physical change, which is in itself a great task upon the nervous system. If, then, you add to that the natural strain, the strain of the study, the mental application, it is not to be wondered at that sooner or later many of those children, who are very attentive to their books, will break down. In those cases I find that it is not medicine that they require, but simply to direct their energies into the proper channel or to give them an entire change of occupation. As a rule we find that those patients do not take any exercise whatever. They go to school from nine to twelve and from one to four o'clock; they take piano lessons after school and when they get through with that they have some more studies; they don't get outdoors at all. In some extreme cases of nervous breakdown that I have seen of that kind I have either stopped the attendance entirely, or very materially lessened the mental

application and then put them through a course of systematic muscular exercise treatment, with recovery usually in a short time and without any drugs whatever. Mothers will bring their daughters to me and say, "this child is weak and tired out and needs a tonic." If you will simply throw your physic to the dogs, give those children physical exercise and particularly under your own personal direction, I am sure that you will get results that you cannot obtain in any other way.

SPUTUM FROM PUBLIC PLACES CONTAINING BACILLUS TUBERCULOSIS.

By C. R. ORR, M. D.,
Of the Pathological Laboratory of the University of Buffalo,

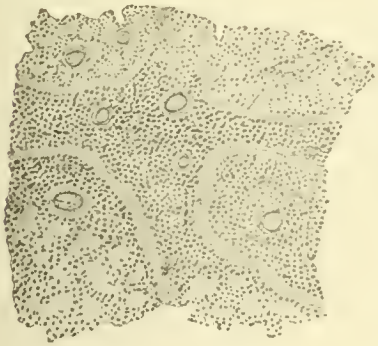
WITH AN INTRODUCTION

ON LABORATORY METHODS IN MEDICINE.[1]

By HERBERT U. WILLIAMS, M. D.,
Professor of pathology, University of Buffalo.

INTRODUCTION BY DR. WILLIAMS.

THE death of Dr. Edward C. Seguin, of New York, recently, who was prominent in introducing the clinical thermometer in America, reminds us that it is only about twenty-five years since that instrument has come into general use in medicine. The thermometer was one of the first of a series of devices destined to place the diagnosis of disease upon a footing with other exact sciences. These instruments, unfortunately, are seldom so compact and simple of application as the thermometer and can generally be employed only in the office or laboratory. So a whole series of manipulations has arisen—like the counting of the number of blood corpuscles in a given volume of blood, the detection of tubercle bacilli—which make laboratory methods a necessary part of the physician's equipment. Every doctor, nowadays, must either carry on this work himself or secure some one to do it for him. Each year sees the tendency toward the employment of



Broncho-pneumonia.

1. From the University of Buffalo Annual.

exact methods becoming more pronounced. Intelligent patients are beginning to expect to see them used, and to ask for them. The medical schools, and it may be said to their credit, have not only been equal to the situation in teaching their students these new procedures, but they have anticipated the demand. Most of the exact methods have originated from purely scientific studies, carried on by men connected with some of the schools.

Lack of space will not permit any account of the functions of laboratories for chemistry, physiology and therapeutics. It is particularly to the branches in which the microscope becomes one of the indispensable tools of the student that I wish to call attention. For it is along those lines that the most radical changes have taken place in recent years. They are (1) the study of the microscopic structure of the parts of the normal body (normal histology); (2) the study of the same parts when diseased (pathological histology); (3) the action of bacteria in producing disease (bacteriology); (4) the application of exact methods to the detection of disease, which I mentioned in commencing.

Epithelioma, infiltrating the wall of the esophagus.

It is plain that the information derived from such work must be an essential part of a doctor's education. But scarcely less valuable is the training which leads to the acquirement of habits of delicacy and precision. It is my firm belief that the physician of the future will be a more careful man, as a result of the discipline of the laboratory, and that surgeons and specialists will be more painstaking and methodical. The teaching in these laboratories brings the students actually in contact with the matter to be studied more closely than in almost any other department. To ensure the careful examination of each preparation the student makes a drawing of it, which not only compels accurate observation on his part, but enables the instructor to determine whether or not it has been rightly seen and understood. Two samples of such drawings, which are average

specimens, will show how well one making no claim to artistic ability can interpret what is before him.

The laboratories of our schools and hospitals have another duty to perform, no less important than that of teaching beginners. It is the study of the great problems which have as yet defied solution. For, notwithstanding the progress that has been made in this nineteenth century, we can only say that we have begun to know about a few things and many things we do not understand at all. The investigation of such problems is usually carried on by teachers or post-graduates, but our school has found that in a small way it may be done by undergraduates.

A sample of photomicrographic work (Orr tubercle bacilli) is given in connection with the following paper, which is an illustration of what can be accomplished during a student's leisure hours. No function of a university is better entitled to the interest of the public than this, which is called "research work." When, to select examples merely, we consider what great good to humanity has come from antiseptic surgery or from the diphtheria antitoxin, both purely outgrowths of laboratory researches, we appreciate how far-reaching the results of those studies may be and we can claim for them the sympathy of the whole community.

SPUTUM FROM PUBLIC PLACES CONTAINING BACILLUS TUBERCULOSIS.

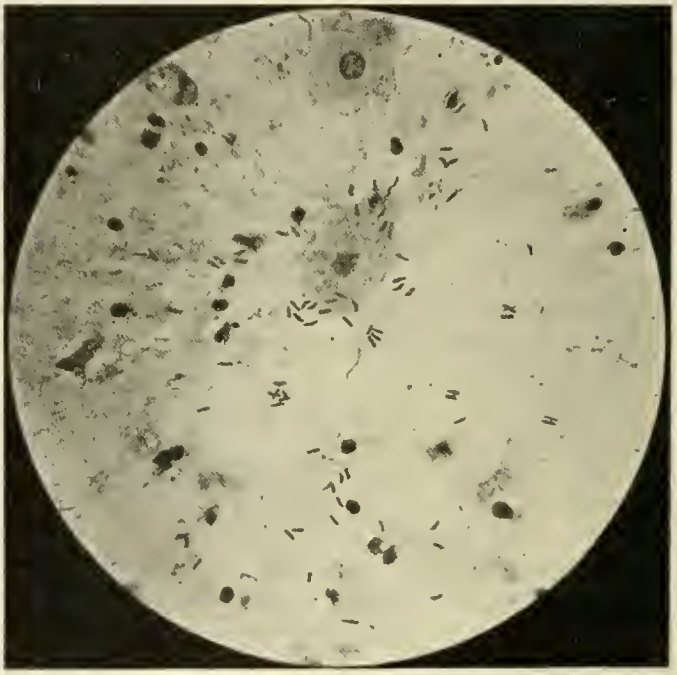
By C. R. ORR, M. D.

In tubercular disease the respiratory system has been shown to be the seat of primary infection in a large majority of cases. Osler, *Practice of Medicine*, says: "The frequency with which foci are met with in the lungs and bronchial glands is extraordinary and statistics of the Paris morgue show that a considerable proportion of all persons dying by accident or suicide present evidences of the disease in these parts." In another paragraph he gives a record of 125 post-mortems at the Foundling Hospital, New York, the bronchial glands being tubercular in every case.

The manner of such infection can be easily explained by the habit of expectorating in public places. Nuttall's (*Bulletin John Hopkins Hospital*, May, 1891.) experiments in counting the number of bacilli thrown off in the sputum from a patient with moderately advanced tubercular disease give us the astonishing figures of from one and one-half to four and one-third billion every twenty-four hours. The

dangerous character of such expectoration, taken in consideration with the frequency and freedom of the habit of expectorating in this country, is perhaps the explanation of the frequency of infection by way of the respiratory system.

The danger lies not so much in the open air as in dwellings, hotels, saloons, theatre corridors, street cars and public buildings where direct sunlight cannot penetrate. Sternberg (*Manual of Bacteriology*) says that the tubercle bacillus is especially susceptible to



ORR.—Tubercle bacilli in sputum stained with carbolic fuchsin and methylene blue. Spencer 1 12 oil immersion.

the action of direct sunlight, it being killed in from a few moments to several hours, depending upon the thickness of the layer, and by diffused light, when placed near a window, in from five to seven days, while in an ordinary dwelling room it retains its virulent power for two and one-half months, gradually losing it after that time. It would seem, then, that attention and even legislation should be brought to bear upon this subject, so that the danger may be reduced to a minimum. On March 25, 1897, the Rochester board of health had

an ordinance passed prohibiting expectoration on sidewalks and in public places and although the ordinance is so framed that violaters cannot be prosecuted considerable good is accomplished indirectly, as the street car company had large cards printed with the ordinance in full and posted them in their cars.

To form an idea of how widely the tubercle bacilli are spread in sputa gathered at random, I collected forty-eight samples taken from various public halls and corridor floors of this city. Three of these samples upon examination were found to contain the bacilli in such number as to make diagnosis positive.

In 1895, Dr. W. G. Bissell, city bacteriologist, made a collection of fifty-six samples from the street cars of this city, finding four of that number containing tubercle bacilli, an average of seven and fifteen one-hundredths per cent., while in my lot the percentage was five and fifteen one-hundredths. Estimating the average of the two lots it would seem that out of every one hundred expectorations there are six which contain the bacilli.

The ways in which this infected sputum may be carried about are various. It may become dry and ground into a dust and so float in the atmosphere. Women may carry it home on the edges of their dresses and so scatter it on the floors, or it may be brushed off with the dirt in the process of cleaning and so infect the air. Shoes, clothing, food, drink, all may become infected by particles of dust on which the bacteria float as long as the present habit of expectoration exists.

The quarantine department of the marine hospital service requires an army of men and vast expenditures of money to shut out infectious diseases. Yet tuberculosis is found to such an extent that of the total mortality it claims 15 per cent. If our government should start a crusade against this disease, simply giving attention to the unhygienic practice of expectoration at random in public places and walks and enforcing the rulings with the same energy that is shown by the marine hospital service, it is probable that the mortality of tuberculosis would be reduced from the present percentage to a much lower figure.

The manifestation of this disease elsewhere than in the lungs are probably in many, if not a large majority of cases, caused by material infected by the discharges (sputa) of the pulmonary form. Attacks on the latter form are indirect attacks on the former.

It is to be hoped that the departments of health in our cities will soon be vested with sufficient power to take up this question and

enforce some sort of control over the habit of expectorating in public buildings, conveyances or on sidewalks.

I am indebted to Dr. Herbert U. Williams, director of the pathological laboratory for having assisted and verified this work.

WHEN SHALL THE UTERUS BE REMOVED IN PELVIC AND ABDOMINAL SURGERY?[1]

By C. C. FREDERICK, B. S., M. D., Buffalo, N. Y.,
Surgeon-in-chief Buffalo Woman's Hospital.

THE object of this paper is to help, so far as it can, to further a spirit of conservatism in pelvic and abdominal surgery. I wish to be understood as condemning all operations upon women which are not positively indicated. Too many women in the past have been the subject of operative procedures, when general treatment for general neurasthenia would have been more proper and much less harmful. I believe that true conservatism consists in operating only when an operation is indicated, to do all that is necessary at that time, provided the patient's condition will allow it, and to leave her in as nearly a normal condition after operation as possible. I know from my own observations in many operating rooms that in the past and at present many women are subjected to the removal of normal organs, which ought to be preserved. Thousands of women have had tubes, ovaries and wombs removed early in their child-bearing period, whose lives would have been far happier and whose health would have been far better if it had not been done.

Woman was created with pelvic organs which were designed to be in functional activity during a period of about thirty to thirty-five years. If these functions are artificially stopped prior to the period of their normal cessation, it is reasonable to suppose that the woman's condition will not be so good as when she is having the normal functions. Such are the facts of experience. The further away from the age of the normal menopause we produce an artificial menopause, the more profound are the nervous disturbances which result. So many operators seem to forget that the pelvic organs were placed there for a specific purpose and that we ought, conscientiously, to preserve every normal structure which is found. A great deal has been written about the ill results of leaving the uterus in the pelvis. Very little has been written, however, about the ill results of the

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

indiscriminate removal of these organs when they were not totally diseased. The French school of vaginal hysterectomists and their followers everywhere have done much of this, to me, unjustifiable sacrifice of normal organs. That is the reason why I am so much opposed to vaginal pelvic surgery. Many a uterus and many a tube and ovary are removed by this route, when by the abdominal route, if the operator were conservatively inclined, the organs might be preserved, simply because they could be handled and inspected thoroughly before any steps are taken which necessitate their removal. I am not speaking now from prejudice; I am speaking of what I have positively seen done by prominent operators in this country. When I have witnessed these operations, I have thought, if it be true that the truth must prevail, this method of operating would soon be relegated to its proper place in surgery and not be carried to an extreme, as it has been, entirely detrimental to the physical well-being of the suffering women who seek relief at our hands.

It has been asserted by some operators that the uterus itself was often a source of distress if left in the pelvis after removal of a part of the adnexa for chronic inflammatory disease; therefore the belief arose that if the uterus and the other healthy adnexa were to be removed that the patient would be better. I have tried to keep informed, so far as it is possible, of the results of operations upon every patient. In comparing these results I cannot ascertain that those from whom I have removed the uterus, tubes and ovaries for chronic pelvic inflammations have progressed any more rapidly, or have recovered any better degree of health than have those in whom I have preserved the uterus and perhaps only a small piece of one ovary. I have noticed that for one or two years those from whom I have removed all the pelvic organs have had exaggerated nervous disturbances incident to the menopause and many of them have been wretched. Some have not suffered so much. Many of them at first have had a return of sexual desire which has gradually waned and eventually been lost. On the contrary, those whose uteri and an ovary or a part of it, ever so small, has been left, the menstrual function has returned, sexual appetite has become normal and remained so. It not infrequently happens that a menorrhagia or too much uterine discharge may necessitate a second curettage for its relief, but that is nothing compared to the fact of being totally unsexed, or to the despondency which I find harasses these unfortunates who are no longer wives to their husbands.

The case must be indeed a bad one of chronic inflammation of

the appendages in which no part of either ovary is not found sufficiently normal to resect and leave in situ. It is now nearly two years since I have removed the uterus in any case of this kind, because I have diligently sought for a chance to leave it. In seeking for that chance I have also sought diligently to find a small part of one or both ovaries which I could resect and leave in. I have never had occasion to regret the effort expended in this direction. I have also endeavored to be conservative toward the tubes also. I am of the opinion that if both tubes and ovaries must be removed entirely it is as well or better to remove the uterus also by supravaginal amputation, which is easier than total extirpation. The uterus after removal of both adnexa is a useless organ and it may be a source of subsequent danger by the development in it of new growths, benign or malignant in nature. The operation is much simplified by removing the uterus, leaving in the stump of the cervix. A case so bad as to necessitate the removal of all of both adnexa will have large oozing and bleeding surfaces after they have been torn from their dense beds of adhesions. These denuded spots are removed with the uterus and instead of raw denuded and oozing points on the peritoneum we substitute a clean peritoneum by sewing the flaps of peritoneum over the cervical stump. The operation is shorter, the hemostasis is more perfect and the peritoneum is left healthier and cleaner. Therefore, from the standpoint of convenience and expedition I rather remove the uterus than do a conservative operation, where one has to tear up adhesions, sew over oozing points and resect and sew up tubes and ovaries. It takes longer to do conservative work and requires much more skill.

I have an experience in two cases from whom I removed double ovarian cysts at about the period of the normal menopause. One occurred in 1895 and the other the present year. Both were feeble women, the uterus was apparently perfectly normal and as I desired to make the operation as short as possible I removed the double cyst and closed the abdomen. Both developed carcinoma of the uterus within six months and when they returned to me for second operation were too far advanced to do a hysterectomy. These are not the only old women from whom I have removed both ovaries and not the uterus. But these two developed cancer, which might have been obviated had I removed the uterus at the time of operation. I believe it wise to remove the uterus always in women at, near, or past, the menopause if it can with safety be done during the course of operation.

Until recently the operation for fibroid tumors of the uterus has been total extirpation. There is a class of soft, bleeding fibroids that

can be relieved and sometimes cured by tying the uterine arteries through the vagina. In 1895 I reported to the American Medical Association my experience in five cases. This plan is not applicable to all fibroids and if used will not benefit any but the one class—namely, small, soft, bleeding fibroids.

Within the past three years I have enucleated from the uterus intra-abdominally multiple fibroids of the uterus in about a dozen cases, leaving the uterus in situ. As many as fourteen fibroids have been removed from one uterus, ranging in size from a marble to a large orange, some sessile, others partly pediculated. These have all been in young women under forty, most of them about thirty, anxious to bear children. I do not think that hysterectomy is a profitable operation in these cases. The same facts hold true of this conservative operation as do in chronic pelvic inflammations. It is much easier to do the hysterectomy. It is often difficult to control oozing from the uterine walls. Dr. Howard Kelly, of Johns Hopkins, I notice, has just published a paper on this subject in the *Journal of the American Medical Association.* He also now is advocating more conservatism than formerly in the treatment of multiple fibromata. The necessity for hysterectomy in the treatment of fibroids is now confined to the hard interstitial myo-fibromata.

And now I come to the consideration of hysterectomy for malignant growths of the uterus. When should the uterus be removed for malignant growths? If the malignancy has gone beyond the limits of the uterus, it is useless to subject a woman to the pain and danger of hysterectomy, for it will certainly recur. She may live longer even when it does recur, but every aspect of the disease is the same except that the uterine hemorrhages are absent in its fatal course. I have long since ceased doing hysterectomies unless I can positively find, under anesthesia, no invasion of the tissues adjacent to the uterus.

Right here I wish to drop a suggestion to gentlemen in family practice as to the early diagnosis of malignant disease of the uterus. There is not one case out of five which I see with uterine cancer that is not too far advanced to give the woman any chance of cure by hysterectomy. Uterine hemorrhage between the ages of thirty-five and fifty is too frequently carelessly taken to be due to the menopause. Uterine hemorrhage is always a danger signal, a red flag thrown out as a warning. If these cases are examined early and diagnoses made, hysterectomy promises well for them. The trouble is, and always has been, that most of the cases upon which we do do hysterectomy for cancer are too far advanced—most of them have a

history of hemorrhage for from six months to one year. Hysterectomy could be done early, return of the disease could be prevented and the large mortality from uterine cancer could be very materially lessened by early diagnosis of malignancy.

64 RICHMOND AVENUE.

A CENTURY OF MEDICAL HISTORY IN THE COUNTY OF ERIE—1800-1900.

BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

Pioneer Physicians—Medical Societies—Medical Colleges—Hospitals—Medical Journals—Medical Officers of the Civil War—Women Physicians—History of Homeopathy—Individual Members of the Profession.

[*Continued from the April edition.*]

AT THE end of the first decade, that is, in 1831, the annals of the society indicate that very little progress had been made by the medical profession during that period. It does not appear to have improved in *esprit de corps* to any appreciable degree, nor does its *personnel* seem to have bettered itself in quality or quantity. The names of twenty or more members appear but once on the records and only a total of twenty are found on the roll in 1831. Of the original charter members but nine remained—namely, Cyrenius Chapin, Josiah Trowbridge, John E. Marshall, Benjamin C. Congdon, of Buffalo, Charles Pringle, of Hamburg, Rufus Smith and Jonathan Hoyt, of Aurora, Ira G. Watson, of Wales, and William H. Pratt, of Eden. The following names were recorded on the secretary's book, but they do not appear to have completed their membership—namely, Daniel Allen, Nathaniel R. Olmstead, Isaac Dunning, John Allen, Henry Hitchcock, Thaddeus Hubbard, Parley B. Spaulding, James M. Smith, Jonathan Foote, Daniel H. Orcott, Israel Congdon, Alvin Cowles, Sidney R. Morris, Marvin Webster, John D. Fisk, Edward J. Durkee and W. P. Proudfoot.

If the profession of medicine and the medical society did not make substantial advance during the period from 1821 to 1831, it must be admitted in extenuation that this was a period of privation, embarrassment and distress. The people were for the most part poor, or at least not wealthy. They had hardly recovered from the effects of the war and there was but little capital with which to carry on great enterprises. If, then, the people themselves were not prosperous, how could the medical profession expect to advance? It was

a time, too, when quackery was gaining foothold: red pepper and lobelia represented advanced therapy, while Thompsonian and steam doctors were abroad in the land. The conditions, in short, were those generally pertaining to newly settled regions. Under such environment it may be easily understood that the practice of medicine was carried on by a few faithful followers of the science at a disadvantage that was well-nigh discouraging, and which would have dismayed hearts less stout than theirs. Some, indeed, were obliged to supplement their already scanty incomes by engaging in other pursuits part of the time, while others felt compelled to abandon the profession altogether.

The medical society keenly felt the effect of the hard times and in 1825 sought to replenish its treasury by raising its fee for membership from $2 to $5. The annual dues remained at $1, as before. That an expedient of such doubtful propriety should fail of its purpose is not surprising. Only two new members joined during the succeeding three years.

The society, however, was not idle during this period. It appears to have been among the first in the state to appreciate the value of vital statistics, for a bill on this subject was drafted under its direction, which was sent to the legislature for action. It also devoted much attention to the subject of vaccination and was always aggressive in the various branches of medical science. A number of men, too, joined the society during this period who deserve special notice.

Dr. Bela H. Colgrove, of Sardinia, was one of these. He was a native of Rhode Island, a graduate of the College of Physicians and Surgeons of New York and settled in Sardinia in 1820. He joined the society in 1823 and was president in 1828. He resided in Buffalo for a few years and was associated in practice with Drs. Trowbridge and Marshall. Finally, he returned to Sardinia, where he continued his professional work for about fifty years. He became famous as a surgeon and his services were in demand in adjoining counties. He died March 19, 1874, aged 77 years.

Moses Bristol was born in Oneida county, came to Buffalo in 1822 and joined the society in 1823. He held the office of censor during the years 1834, 1836, 1837, 1839 and 1840, was president in 1833 and again in 1838. He continued in active practice until 1849, when his health began to fail, but he lived until 1869. Dr. Bristol did much to maintain the character and standing of the profession during the period of his activity. Of others who joined the society in 1823, we find the names of Orlando Wakelee, of Clarence, and

Emmons S. Gould. Benjamin C. Congdon, one of the founders, was treasurer of the society for one year, from 1823 to 1824, and continued as a member until 1833.

Henry Rutger Stagg became a member of the society in 1824. He was secretary and librarian in 1828, again secretary in 1833 and president in 1834. He was a man of attainments, possessed a literary taste, but withdrew from the ranks of the profession, severing his connection from the society in 1836. He became associate editor of the *Buffalo Journal*, a weekly newspaper, in which occupation he continued until 1838. Of the other members who joined the society in 1824 we may mention Erastus Wallis, of Aurora, Judah Bliss, of Buffalo, and Carlos Emmons, of Springville. In 1826 but two additional names are recorded—namely, Michael Martin and Stephen Dean, the latter locating at East Hamburg. Ira Shedd, a licentiate of the society, appears on the rolls during 1827; likewise Orson Cary, the latter becoming a censor in 1830.

Carlos Emmons established himself at Springville, joined the society in 1824, was elected vice-president in 1833, president in 1834, and a delegate to the state society in 1841. He also served as a member of the assembly and in the senate.

Erastus Wallis, of Aurora, became a member in 1824, vice-president in 1839, president in 1840, and served several years as a censor. He came to Buffalo in 1853, where he resided a few years and then returned to Aurora. He was a member during thirty-eight years and died in 1862. In 1828 J. S. Trimble joined the society; John M. Harrington, a licentiate, became a member in 1830, as also did Orson S. St. John and Lucien W. Caryl. D. J. Williams, of Aurora, joined in 1831.

We have already shown why the medical society failed to grow in numbers during the first decade of its existence, but now a new and prosperous epoch seemed dawning. Buffalo more than trebled its population in the five years between 1825 and 1830, while the county of Erie, exclusive of Buffalo, more than doubled its inhabitants during the same period of time.

Bryant Burwell, a native of Herkimer county, came to Buffalo in 1824 and joined the society in 1825. He was associated in practice with Dr. Cyrenius Chapin for some years. He was vice-president in 1832 and a delegate to the state society in 1833. He was appointed by the state society one of a committee of three to examine the medical laws of the state with reference to any amendments needed; also he was made a member of a committee to obtain an

opinion from the attorney-general upon the question of the powers of medical societies as to the admission of members, which was an important question then and has always been one of moment. He became a permanent member of the state medical society in 1837. Dr. Burwell represented the Buffalo Medical Association at the initial convention held in New York, in 1846, with reference to organising a national medical society and he was a delegate to the first and second meetings of the American Medical Association, held respectively at Philadelphia in 1847 and at Baltimore in 1848. Again, in 1850, he represented the city association at the Cincinnati meeting of the American Medical Association. He was a censor of the state medical society in 1847, 1848 and 1850, and a member of the committee of correspondence of that society for several years. Dr. Burwell maintained an active part in the deliberations of the county society until 1854 and was one of its censors for many years. He died September 8, 1861, aged sixty-five years, having maintained the respect and confidence of his professional confrères during all the years of his residence in Buffalo.

Alden S. Sprague, another strong character, a native of New Hampshire, came to Buffalo a year later than Dr. Burwell,—namely, in 1825, and was elected a member of the county society in 1826. He was treasurer from 1829 to 1833 inclusive, and was chosen president in 1835, during which year he was also health physician of Buffalo. In 1851 he was again elected president, but ceased to be an active member in 1852. He was a delegate to the state society in 1839 and again in 1845, and was elected a permanent member of that body in 1847. He died January 7, 1863, but little more than a year after Dr. Burwell, with whom he had been a contemporary for thirty-seven years. Dr. Sprague was recognised as one of the foremost physicians of his period, and he obtained also a deserved fame as a surgeon.

Harry H. Bissell, a native of Vermont, came to Clarence in 1828, during which year he joined the society. Afterward he removed to Lancaster, where he was associated in practice with Dr. Hyde. Finally, he returned to Buffalo, was elected president of the society in 1836 and also served as a censor for many years. He was sent as a delegate to the state society in 1837.

Luther Spaulding, of Williamsville, became a member of the society in 1831, although he had been a resident of the county since 1821. In 1832, Alden Thomas, Arba Richards, of Wales, Horace B. Camp, of Aurora, and Josiah Barnes, Joseph R. Jones and James Edwin Hawley, of Buffalo, became members of the society.

Charles Winne, a native of Albany, came to Buffalo in 1833, in which year he also joined the society. He was chosen a delegate to the state society in 1834 and was health physician of Buffalo in 1836. He served as treasurer of the society during the years 1836, 1837 and 1838; was secretary in 1845–46, and was associated in practice for some years with Dr. Josiah Trowbridge and Dr. Walter Cary. He became president of the society in 1863, and attained fame as a surgeon. He died in 1877.

Gorham F. Pratt was another physician who left the stamp of a strong individuality on the place and period of his activity. He was born at Reading, Mass., in 1804, and came to Buffalo at the age of 26 years, that is, in 1830. He entered the office of Dr. Cyrenius Chapin as a medical student and took his doctorate degree at Fairfield, N. Y., in 1831. Soon afterward he formed a partnership with Dr. Chapin, his preceptor, which continued until the death of the latter in 1838. Dr. Pratt became a member of the society in 1833, was secretary from 1834 to 1840, was elected vice-president in 1840 and president in 1841. He acquired a large practice among Buffalo's best families and was one of the most distinguished physicians of his time. He made a model secretary, as indicated by the records during the period of his service as such. He died April 5, 1871.

Lucian W. Caryl and Orson S. St. John also became members of the society in 1830. Dr. Caryl was chosen treasurer in 1834.

Dr. St. John was a native of Buffalo, where he received his preliminary education. He was educated in law at Cleveland and Cincinnati, O., and graduated in medicine at Philadelphia. His mother's house was one of two left standing when Buffalo was burned in 1813. Possessed of independent means, he practised little in either profession, but for half a century devoted himself to literature and scientific investigation, the latter especially directed toward the origin of life and celestial mechanics and resulting in the discovery of many now well-known principles. Dr. St. John was a deep student, an extensive traveler and was widely known in collegiate and scientific circles in Europe and America. After the death of his wife several years ago his home, when in this country, had been with his daughter, Mrs. Andrews, of New York. He died July 9, 1897, aged 87 years.

Horace B. Camp was vice-president in 1838 and 1841, and during the latter year he was chairman of a committee to which was referred the petition from the Medical Society of the County of Monroe, asking the coöperation of this society in procuring a repeal of the law of 1836, which obliged persons with foreign diplomas to be examined

by the censors of the state society. His committee made an adverse report to the repeal of the law, but recommended such a modification of it as was proposed in 1837—namely, to the effect that physicians possessing foreign diplomas should be granted the privilege of an examination by the censors of county medical societies, or by the censors of the senatorial district in which they may reside.

James E. Hawley was elected vice-president in 1836 and president in 1837; he became a permanent member of the state medical society in 1848.

Josiah Barnes, a native of Connecticut and graduate of Yale College, took his medical degree at Jefferson in Philadelphia. He came to Buffalo in 1832 and joined the society the following year. He acted as librarian during the years 1835, 1836 and 1837; was secretary in 1840–41; president in 1842 and treasurer from 1847 to 1851 inclusive. He was one of the ablest physicians of Buffalo, a permanent member of the state society and died June 1, 1871, lamented by all who knew him.

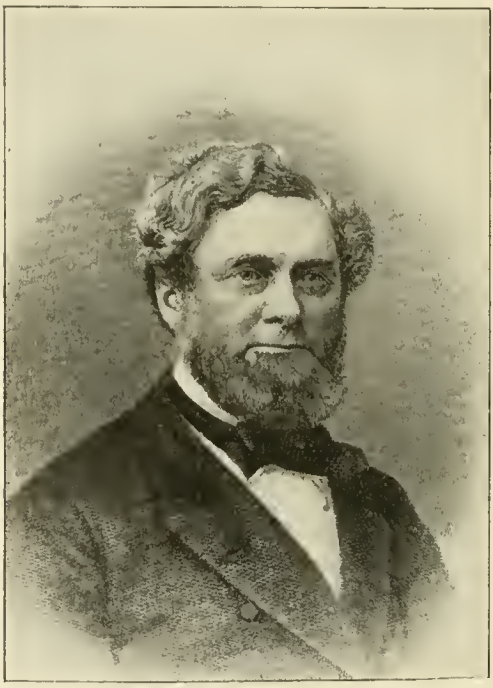
Henceforth in the pages devoted to the consideration of this society, for the sake of convenience, a chronological record of the officers and members will be made, first giving the year, then the names of the members who joined, and, finally, the officers for the year in question. Brief sketches of prominent members who joined in each year will also be given. This will make the record easy of reference.

1834—During this year Francis L. Harris, James P. White, H. N. Munson, L. B. Benedict and Silas Smith became members.

James Platt White (1811-1881), a native of Livingston county, N. Y., commenced the study of medicine in the office of Dr. Josiah Trowbridge in 1830. This was the beginning of a medical career destined to attain the largest fame, though it was little foreseen at the time mentioned. Probably no man of his time contributed more to the history of medicine in Erie county than Dr. White. He took his doctorate degree in March, 1834, at Jefferson Medical College, Philadelphia, and in June of the same year joined the society. Dr. White was librarian in 1840; secretary during the years 1842, '43, '44 and was elected president in 1855. He represented the society in 1850 as a delegate to the state medical society and to the American medical association. He became a permanent member of the state society in 1854 and its president in 1870. In 1877 he was elected vice-president of the American medical association. In 1878, at the Buffalo meeting, he was supported for the presidency by the New

York delegation. Through the machinations of two or three designing men who shall be nameless—one yet living—he was defeated, the nominating committee standing fourteen for Dr. White and fifteen for his competitor, Dr. Theophilus Parvin. It is to the credit of the latter that he took no part in the tactics that defeated Dr. White; indeed it is probable that he was ignorant of the whole affair until after the election was over.

This is not the place in which to write an eulogium of Dr. White—that has been properly done elsewhere[1]—but it may be justly affirmed that since his decease, September 28, 1881, his place has never been filled. He was a man of affairs as well as eminent in his profession, and his relations to many enterprises looking to the prosperity of Buffalo testify to his public-spirited progressiveness. Dr. White's part in history will be referred to again when medical colleges, medical journals and hospitals are dealt with.



JAMES PLATT WHITE, M. D.

Francis L. Harris became a member of the board of health of Buffalo in 1831; health physician in 1838; vice-president of the society in 1845; president in 1846; delegate to the state society in 1836 and 1846, and a permanent member thereof in 1857.

Officers for 1834—President, Carlos Emmons; vice-president, Henry R. Stagg; secretary, Gorham F. Pratt; treasurer, Lucian W. Caryl; librarian, Erastus Burwell; censors, Josiah Trowbridge, Moses Bristol and Charles Winne.

1. Dr. Austin Flint, Trans. Med. Society State of New York, 1882, p. 337.

1835—Henry L. Benjamin, Benjamin A. Batty, H. H. Hubbard, W. H. Turner, Marcius Simons, W. H. Christison and C. H. Raymond.

It is recorded that Dr. Carlos Emmons, president of the society in 1834, was fined ten dollars for failing to deliver the president's annual address in accordance with an existing by-law.

Dr. Charles H. Raymond during the year read before the society a thesis on the use of the stethoscope, an instrument then coming into use. He acted as librarian during the years 1838, '39, '41 and '42, and was a censor for many years, but ceased to be a member in 1844.

Officers for 1835—President, Alden S. Sprague; vice-president, W. H. Pratt; secretary, Gorham F. Pratt; treasurer, Lucian W. Caryl; librarian, Josiah Barnes; board of censors, Erastus Wallis, R. Smith, Charles Winne, Bryant Burwell and Josiah Trowbridge.

1836—George Lathrop, Nelson D. Sweetland, Abraham Miller, Samuel Salisbury, Jr., William A. Greene and Brock McVickar.

Officers for 1836—President, H. H. Bissell; vice-president, J. E. Hawley; secretary, G. F. Pratt; treasurer, Charles Winne; librarian, Josiah Barnes; censors, Bryant Burwell, F. L. Harris, H. B. Camp, Jonathan Hoyt and Charles Winne. Delegate to state medical society, F. L. Harris.

1837—Franklin Fitts, Charles A. Hyde, Horatio N. Loomis, Benjamin B. Coit, Samuel M. Crawford, Nelson Peck, Jesse Merritt, Edwin Griffin and Samuel M. Abbott.

Horatio N. Loomis, a native of Connecticut, came to Buffalo in 1830, and in 1837 joined the society. He served as treasurer from 1839 to 1846 inclusive; was elected vice-president in 1851, and was sent as a delegate to the State society in 1848. During the organisation period of Buffalo Medical College Dr. Loomis had ambitions for the chair of obstetrics. It is thought by many that he never forgave his successful rival, Dr. White, who obtained and held the chair for thirty-six years. Be that as it may, there was never afterward a cordial feeling between these two men, both successful practisers of the science and art of medicine. Dr. Loomis acquired a large following, and died March 22, 1881, respected by a great community.

Samuel M. Abbott was a student of Dr. John E. Marshall and a licentiate of the Medical Society of the County of Erie. He obtained membership in 1837, which continued until 1843.

Officers for 1837—President, James E. Hawley; vice-president, Orlando Wakelee; secretary, Gorham F. Pratt; treasurer, Charles Winne; librarian,

Josiah Barnes; censors, Charles Winne, Moses Bristol, C. H. Raymond, Bryant Burwell and Carlos Emmons.

1838— —— Ford,[1] Morgan G. Lewis, Silas James, Jabez Allen, Noah H. Warriner.

Morgan G. Lewis was born in Buffalo January 15, 1813, and located at Black Rock after graduating in medicine. In 1836 he was invited to assume the duties of editor of the *Black Rock Advocate*. He became a member of the county society in 1838, and continued in that relation until his death, February 8, 1858. Dr. Lewis was a man of courteous manners and a physician of distinction.

Officers for 1838—President, Moses Bristol; vice-president, H. B. Camp; secretaty, Gorham F. Pratt; treasurer, Charles Winne; librarian, C. H. Raymond; censors, Horatio N. Loomis, Josiah Barnes, Brock McVickar, Erastus Wallis and Carlos Emmons; delegate to the state society, Alden S. Sprague.

1839—Grove C. Gage, Joseph Wilder, James M. Hoyt, James Ives, J. C. Bronk.

Officers for 1830—President, Josiah Trowbridge; vice-president, Erastus Wallis; secretary, Gorham F. Pratt; treasurer, Horatio N. Loomis; librarian, C. H. Raymond; censors, Horatio N. Loomis, James P. White, Josiah Barnes, Carlos Emmons, Moses Bristol.

1840—J. B. Pride, Edmund Brown, George H. Lapham.

J. B. Pride, of Alden, was elected a member in 1840, vice-president in 1842, president in 1843. In 1849 he was appointed keeper and physician of the almshouse and was reappointed in 1850.

George H. Lapham, of Aurora, became a student in the office of Dr. Jonathan Hoyt, at Hamburg, in 1841, served for several years as a curator in the Buffalo medical college, enjoyed a large practice for many years and died December 14, 1885, aged 72 years, respected and lamented by a large community.

Officers for 1840—President, Erastus Wallis; vice-president, Gorham F. Pratt; secretary, Josiah Barnes; treasurer, Horatio N. Loomis; librarian, James P. White; censors, Elliott Burwell, Alden S. Sprague, C. H. Raymond, F. L. Harris, H. B. Camp.

1841—Austin Flint, William Van Pelt, Edwin M. Colburn, George W. Force, Nathan Way and John G. House.

Austin Flint, a native of Massachusetts, came to Buffalo in 1836 and joined the society in 1841. He was appointed health physician of Buffalo in 1842 and in 1845 established the BUFFALO MEDICAL JOURNAL. In January, 1858, he was elected president of the society, but an appointment at the New Orleans School of Medicine took him hither, hence he was not present at the annual meeting in 1859. At the June meeting, 1861, however, his presidential address was read

1. Christian name does not appear on the records.

by Dr. Sandford Eastman, the subject being, My retrospections of medical practice in Buffalo. This paper, full of interesting material, was published in the MEDICAL JOURNAL, then conducted by Dr. Miner, and is the first article in No. 1 of the new series, August, 1861. Dr. Flint died at New York, March 13, 1886, aged 73 years. In the sections on medical colleges and medical journals Dr. Flint's part in the county medical history is further considered.

AUSTIN FLINT, M. D.

William Van Pelt, who became a member in 1841, resided at Williamsville, and was president of the society in 1856; a delegate to the State society in 1859, and permanent member of the latter in 1871. Dr. Van Pelt was a man of accomplishments and enjoyed the respect and confidence of a large community. He contributed an article to the BUFFALO MEDICAL JOURNAL in 1846 entitled Epidemic erysipelas at Williamsville, one in 1855 on Epithelial cancer, and later one on Pneumonia. He acquired a large practice and died October 12, 1890, aged 75 years.

John G. House resided at Springville and was elected president in 1854. He, too, was a man of literary accomplishments and contributed an article to the BUFFALO MEDICAL JOURNAL on Erysipelas in 1846, one in 1851 entitled Remarks on the third stage of labor, and, in 1854, still another entitled Carcinoma uteri with pregnancy.

Officers for 1841—President, Gorham F. Pratt; vice-president, H. B. Camp; secretary, Josiah Barnes; treasurer, Horatio N. Loomis; librarian, C. H. Raymond; censors, Josiah Trowbridge, Charles Winne, J. B. Pride, Elliot Burwell, C. H. Raymond; delegate to state medical society, Carlos Emmons.

1842—Timothy T. Lockwood, John Mitchell, Sylvester F. Mixer, Jesse F. Locke.

Timothy T. Lockwood became a pupil of Dr. James P. White in 1834. He graduated in medicine at Philadelphia and began practice at White's Corners, remaining there ten years. Afterward he came to Buffalo and was elected mayor in 1858, serving two years. He was a man of energy and forcefulness of character. He died December 22, 1870.

Sylvester F. Mixer was born at Hornellsville, N. Y., December 15, 1815, graduated from Yale college in 1841 and took his doctorate degree from the College of Physicians and Surgeons at New York in 1847. He was appointed health physician of Buffalo in 1850 and elected president of the society in 1852. He represented the society at different times as a delegate to both the state and national bodies, becoming a permanent member of each. From 1858 to 1874 he was attending physician at the Buffalo general hospital. He was a successful and highly respected physician. He died September 16, 1883, lamented by a large circle of friends and patients.

Officers for 1842—President, Josiah Barnes; vice-president, J. B. Pride; secretary, James P. White; treasurer, Horatio N. Loomis; librarian, C. H. Raymond; censors, Carlos Emmons, Bryant Burwell, Erastus Wallis, H. H. Bissell and F. L. Harris.

1843—William K. Scott, Silas Hubbard, Horace M. Congar and Charles H. Wilcox.

The year 1843 seems to have been prolific in supplying good material to the society. William K. Scott was the first physician licensed to practise medicine by the medical society of the state of New York. His diploma was dated 1809. He came to this city from Troy, joined the medical society in 1843 and was elected president in 1844. He was a man of great energy, sterling worth and possessed a diversity of accomplishments. He lived to advanced age, became totally blind and died January 8, 1879.

Silas Hubbard also joined the society in 1843, retaining membership therein until 1855. He was a contributor to the BUFFALO MEDICAL JOURNAL and member of the Buffalo medical association, of which he was vice-president in 1851-52.

In this year, too, Horace M. Congar became a member. He was sent as delegate to the state medical society in 1854 and was elected a permanent member thereof in 1859. He was appointed by the state society as a member of a committee from the eighth senatorial district on the subject of epidemics. In 1848 he opened a private medical school for the instruction of students. He continued an active member of the society until 1875. He died a little later at an advanced age.

Charles H. Wilcox became a member in 1843 and was president in 1850. Dr. Wilcox was a decided acquisition to the society. He was an amiable and able man as well as a skilful physician. He was chosen treasurer in 1856 and again in 1857. Dr. Wilcox was the first medical officer from Buffalo to be commissioned during the war of the rebellion, and a record of his military service will be found under its appropriate head. His death, which occurred November 6, 1862, was a sad blow to the profession and the community. He will be long remembered for his sterling worth, integrity of character, and accomplishments as a physician.

Officers for 1843—President, J. B. Pride; vice-president, Jonathan Hoyt; secretary, James P. White; treasurer, Horatio N. Loomis; librarian, Josiah Trowbridge; censors, F. L. Harris, H. H. Bissell, George H. Lapham, C. H. Raymond, M. G. Lewis; delegate to state medical society, F. L. Harris.

(*Continued next month.*)

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.,
Professor of ophthalmology in Niagara University Medical College.

HEMIANOPIA, WITH ESPECIAL REFERENCE TO ITS TRANSIENT VARIETIES.

DR. WILFRED HARRIS (*Brain*), Autumn number, 1897, discusses quite at length hemianopia and arrives at the following conclusions:

(1) That hemianopia, rarely binasal, more commonly lateral and left-sided, with accompanying constriction of the remaining half fields, may occur as a temporary phenomenon in hysteria.

(2) That hemianopia, due to a vascular lesion of the cuneus, of sudden onset, may commence with marked loss of sight, sometimes amounting to complete amaurosis, and due probably to inhibition of the remaining half-vision center.

(3) That the cortical half-vision centers are not subdivided into centers for light, form and color respectively, and that hemiachromatopsia may be due to a lesion anywhere in the visual path between the chiasma and the cortex.

(4) That quadrantic hemianopia, though strongly suggestive of a cortical lesion, may sometimes be due to a lesion in the internal capsule.

(5) That the macular region of the retina is invariably supplied with nerve fibers on the same plan as the rest of the retina, *i. e.*, each side of it from the corresponding side of the brain. That in all cases of absolute transient hemianopia the dividing line between the seeing and the blind halves invariably passes through the fixation point.

(6) That the cortical center for the macular region in each cuneus is less liable to complete destruction and recovers earlier than the rest of the half vision center.

(7) That cases of persistent hemianopia in which the dividing line passes to one side of the fixation point, leaving it in the seeing half, are to be accounted for, either (*a*) by the escape or partial recovery of the cortical center for the macula, or (*b*) by the acquirement by education of a new fixation point in the retina.

(8) That hemianopic visual spectra of low elaboration, such as red and green lights, or the varieties of scintillating scotoma in migraine, are caused by a discharge in the half-vision center in the cuneus.

(9) That complex visual phenomena of hemianopic type, such as faces, animals, etc., are elaborated in a still higher visual center, which possibly is the angular gyrus; their occurrence in the half field only being due to reflex irritation from a lesion generally in or near the cuneus, but which may be in the optic radiations or optic tract.

(10) That double hemianopia does not necessarily cause permanent amaurosis, in many cases the return of a small area of central vision indicating the escape or recovery of the cortical center for the macula in the cuneus on each side.

(11) That the hemianopia in migraine is due to an epileptic discharge in the half-vision center of one side.

(12) That in many cases an epileptic discharge may originate in or near the half-vision center on one side, in some cases proceeding no further, beyond producing temporary hemianopia, in others producing a typical epileptic fit, and again in others giving rise to unilateral convulsions without loss of consciousness.

(13) That transient hemianopia in such attacks may last for twenty-four hours or longer, and may be due to vascular softening adjacent to, but not involving, the visual center or path.

(14) That transient hemianopia is rare in ordinary Jacksonian epilepsy, and is not liable to occur unless the half-vision center be (1) already slightly damaged, or (2) hypersensitive and prone to spontaneous discharge, as in migraine.

(15) That such transient hemianopia not infrequently accompanies unilateral convulsions in general paralysis, and may possibly occur in uremia.

(16) That the auditory center may be similarly paralysed through spread of the epileptic discharge.

TREATMENT OF BLEPHARITIS MARGINALIS.

DR. AYRES (*Cincinnati Lancet-Clinic*, October 23, 1897.) believes that in the treatment of blepharitis marginalis, the best results are obtained with a solution of hydrogen dioxide and water, equal parts. This accomplishes the desired result and does not pain the eye. It is to be applied with a bit of absorbent cotton, dipped into the dioxide solution and rubbed along the lashes. This should be kept up until the specific oxidising effect is seen on the scales or crusts, as will be evidenced by the bubbles. The edges of the crusts will begin to separate. They are then to be dried with absorbent cotton.

There is a great advantage in using this remedy in children; it greatly lessens the pain of the treatment. It is also of special value where ointments of all kinds produce more or less irritation and sometimes cause an aggravation of the symptoms.

METHOD OF PRESERVING THE EYE FOR SECTIONING OR DEMONSTRATION.

JAMES R. SLONAKER, PH. D., (*Journal of Applied Microscopy*,) describes the following method of preserving the eye for sectioning or for demonstrating the area of acute vision:

In order that the eye may be well preserved, it must be placed, as soon as possible after death, in Perenyi's fluid: 10 per cent. nitric acid, 4 parts; 95 per cent. alcohol, 3 parts; 0.5 per cent. chromic acid, 3 parts.

The eye should be carefully oriented before removing from the head, by sewing a tag to the outer layers of the sclerotic, so that the orientation may afterwards be exact. In removing the ball it should not be punctured, for this invariably causes wrinkling of the retina. As much as possible of the fat and muscle should be removed before immersing it in the Perenyi. The bulk of the preserving fluid should be ten or fifteen times the size of the eye.

The time that the Perenyi should be allowed to act depends on the size of the eye and the nature of the sclerotic. Small eyes, such as rat, sparrow, etc., are usually left in twenty-four hours and large

ones, such as cow, horse, or those in which the sclerotic contains bony plates, thirty-six to forty-eight hours are required. A good deal of latitude may be taken, however, regarding the time.

After the action of Perenyi's fluid, the eye is carried up through the following grades of alcohol, leaving it twenty-four hours in each: 70 per cent., 80 per cent., 90 per cent., 95 per cent., 100 per cent., and, finally, a mixture of equal parts of absolute alcohol and ether. It is then well hardened and ready for celloidin imbedding. Before putting into celloidin a window is cut in the same plane as the desired sections, exposing the hardened vitreous humor. After this is carefully removed, without injury to the remaining structures, the hollow ball is put into celloidin. He has used three grades of celloidin, ranging from very thin to very thick and has left the eye at least forty-eight hours in each. It can remain longer with better results. It is then mounted on a block in the usual manner and cut in 80 per cent. alcohol.

If one desires only to demonstrate the fovea and not to make sections, the front half of the eye may be cut off after passing through the 80 per cent., but preferably after 95 per cent. alcohol. When thus removed, together with the vitreous humor, the retina is seen spreading smoothly over the posterior half of the ball and the fovea, if present, and the optic papilla may be easily seen. Such demonstration material can be kept permanently in 80 per cent. alcohol.

This method applies only in a gross study and cannot be used successfully for the minute structures of the retinal elements. If such is desired, the Golgi method, as used by Ramon y Cajal, or the "methyl blue" method will admirably serve the purpose.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

NEISSER'S METHOD OF TREATING GONORRHEA.

PROFESSOR NEISSER, of Breslau, states (*Dermat. Centralbl.*) that even the best method of treating gonorrhea proves unsuccessful, unless a remedy be employed which will destroy the gonococcus without giving rise to changes in the mucous membrane and increase of the inflammatory process. Of the remedies that he has tried, he gives the first place to protargol, a new organic silver compound, which has the advantage of not being precipitated

by albumin, sodium chloride or alkalies, of being far more penetrating than other silver preparations and of being practically free from irritation and, therefore, available in the earliest stages of the disease. It is, therefore, adapted for prolonged injections, the solution being kept in the urethra for thirty minutes, and the patient being spared the trouble of repeated injections. It is Neisser's custom to resort at once to injections of protargol solution ($\frac{1}{4}$ to 1 per cent.) as soon as the presence of gonococci has been determined.

During the first few days three injections are given daily, the fluid being retained in the urethra five minutes during two of the injections and thirty minutes during the other. Later, one prolonged injection is sufficient. In view of the fact that few physicians are able to institute examinations for gonococci, the author thinks it important that this treatment should be kept up for a sufficient length of time, so as to insure a radical cure.

FUNCTIONAL ALBUMINURIA.

YOUNG, J. C., Newark, N. J., (*Medical Examiner*, July, 1897,) M. B. Life Co., says: Following the publication of Bright's researches in 1827, the presence of albumin in the urine was regarded as a grave omen, indicating almost certain death at no very remote period. A few years of observation were followed by a reaction and the belief that albumin might be found in the urine under conditions compatible with perfect health was accepted. There were writers who maintained that albumin is a physiological ingredient of the urine. Albuminuria exists without endangering life or impairing the integrity of the kidneys, yet it is not physiological.

Charcot proposed three theories to account for albumin in the urine: (1) The hematogenous theory—that albuminuria was due to preliminary changes in the composition of the blood. (2) The mechanical theory—vascular changes in the kidney. (3) The degenerate theory—due to an anatomical modification of the epithelia and glandular tissue of the kidney.

One and two include all cases of functional albuminuria, and, as the hematogenous is associated or connected with the mechanical class, we may regard functional albuminuria as due to vascular changes and as explainable by the mechanical theory.

The kidney is abundantly supplied with blood by the large-sized renal artery, from which large branches pass outward as the arteriæ propriæ renales, through the columns of Bartini, form loops across the bases of the pyramids, and these give off the interlobular arteries

to the cortex and the vasæ rectæ to the pyramids. These vessels give off branches, the afferent vessels, which pierce the capsule of the Malpighian body and form a plexus—the glomerulus, which is directly concerned in the secretion of albumin.

From the glomeruli arise the radicles of the renal veins, which are still filled with arterial blood. These radicles unite and form the vas efferens, which is much smaller than the corresponding artery, a condition which favors renal congestion. After passing through the capsule of Bowman, the vas efferens forms a second plexus, which surrounds the convoluted tubules. These secondary plexuses of veins form the renal venous system. The branches of the secondary plexuses unite and form the renal vein. The convoluted tubules make a dilated sac or Bowman's capsule; becoming attenuated they form the descending limbs of Henle's loops and then pass back to the cortex as the ascending limbs, becoming again convoluted and irregular tubules and emptying into the collecting tubules and thence transmit their contents to the pelvis. The epithelium is cuboidal or columnar in the convolutions and flat in Henle's loops. There are small rod-like bodies perpendicular to the lumen of the tubule situated at the deeper layers of the epithelium, loosely attached to the connective tissue, forming the septa of a reticulated structure of living protoplasm, shown by Heitzmann, Strickler and Millard to be really a formation of living matter.

Physiology.—It is generally conceded that the watery elements of the urine are secreted by the glomerulus, facilitated by the large volume of its vessels the thinness of their walls and the smaller calibers of the efferent vessels. The equilibrium is maintained by increased or diminished secretion of water, according to the degree of blood pressure. If the equilibrium be overcome, damage may result to the organ. The separation of the watery elements of the urine is not simply a physical phenomena, but is largely performed by the epithelia of the glomerulus.

Overbeck showed that compressing the renal artery caused suppression of the urine; relaxing the compression the circulation was at once restored, yet the urinary secretion did not appear for a half to three-quarters of an hour, owing probably to the disturbed function of the epithelia from ligation of the renal artery. Ligate the renal vein and the same result follows. Anoxemia is produced in both cases. That extractive matter of the urine, urea and uric acid, and the like, are formed chiefly in the epithelium of the convoluted tubulesis convincingly confirmed by experimentation. It is demon-

strated by experiment that kidney action is necessary for the synthetical production of hippuric acid. The water of the urine is secreted by the glomerulus, the extractives are partly separated and chiefly secreted by the epithelium of the tubules.

A temporary condition of anoxemia, whether due to either arterial or venous obstruction, induces albuminuria, through diminished cell activity and vitality. The results of experiments performed upon healthy kidneys prove that albumin is secreted by the epithelial cells of the glomeruli, in the capsule of Bowman, and that retardation of the blood current through the vascular plexus of the glomeruli is an essential condition; also that anoxemia of the blood current of the tuft causes albuminuria.

CLINICAL REMARKS ON SOME SUPPURATIONS OF THE URINARY APPARATUS.

REGINALD HARRISON (*Medical Record*, July 3, 1897,) says: "The most common as well as the farthest-reaching cause of suppuration of the urinary organs is gonorrhea. The recent advances made in the bacteriology of this subject have opened the way to progressive methods of treatment. The investigations of Guyon, Janet, Halle and others have demonstrated the life history and development of these microörganisms. We learn that chronic specific suppuration is a far more extensive malady than it is generally supposed to be. This explains the difficulty in many cases experienced in promptly relieving this condition. So long as gonorrhea is confined to the anterior urethra the problem is not a difficult one.

When the bladder becomes infected it is difficult to prevent urethral recrudescence, hence the disease may be almost indefinitely prolonged. Invasion of the bladder is not uncommon, and its symptoms may be subacute, so that attention is not drawn to this complication. The prostate usually shows active manifestations when invaded. The mucous membrane of the bladder is singularly insensitive to bacterial invasion. In the bladder, during the night, the conditions are favorable for development of bacteria, which probably accounts for the matutinal suppuration exuded by the urethra. Ureteral and renal invasion are rare, but it may occur and cause pyelitis and ureteral stricture. Suspected infection of the bladder with microorganisms should be a matter of proof. For this purpose obtain a specimen of urine from the bladder without contamination by urethral germs. Vesical urine may be procured by flushing the canal with the first flow, and collecting specimens from the remainder of the out-

put. A better way is to obtain a specimen by catheter, as directed by the Clinical Research Association. In cases of gonorrhea, examine the vesical urine for gonococci.

If gonococci are found in the discharges or in the vesical urine there is possibility of transference of the infection. If the bladder be infected, the treatment should include flushing the urinary viscus and tract with antiseptics after the measure proposed by Dr. Janet, with some modifications. The object is arrived at in the following manner: "My apparatus consists of an ordinary hydrostatic bladder tank, holding about one pint of water and fitted with a nozzle to which a No. 8 Jacques rubber catheter is attached. The tank is elevated about six feet from the ground, and is filled with warm water containing thirty minims of Condy's fluid to a pint of the latter. For lubricating the catheter I use carbolized vaseline.

"The patient, having emptied his bladder spontaneously, is placed in the recumbent position and the catheter is then passed. Before the nozzle of the irrigator is connected with the catheter as it lies in the bladder, the fluid is allowed to run off for a few seconds, so as to insure that there is no free air in the tube of the apparatus. Then the connection is made, and the fluid is allowed to flow into the bladder by degrees, until the patient is conscious of feeling distention. I generally use from twelve to sixteen ounces for this purpose, allowing it to enter the bladder in jets of about three or four ounces at a time. In this way the feeling of any sudden or extreme fulness is avoided, and the entire area of the mucous membrane of the bladder is unfolded and opened out and thus comes in contact with the permanganate solution. When a sufficient degree of bladder distention is obtained, the catheter is slowly removed, care being taken not to allow the fluid to escape. I then usually lightly palpate the bladder above the pubes with the hand before the patient stands up. This he should then do, and proceed to empty his bladder of its contents by his natural efforts. Thus not only is the bladder washed out, but the whole urethra is flushed in a manner that is impossible with any other artificial method. As the patient is voiding the contents of his bladder, it is well to direct him suddenly to interrupt the outflow once or twice by pressure with the finger on the penile urethra. In this way the lacunæ of the canal are also distended and flushed by the irrigating fluid. This completes the process, which may be repeated once or twice in the twenty-four hours, until the urine and the urethral mucus are found free from organisms. Most patients, after proper instruction, will be able to carry out all these details. On the con-

clusion of each irrigation the patient should rest for a time in the recumbent position."

The abstractor proposed a method of flushing the urinary tract and bladder, without a catheter and without force, in an article read July 15, 1892, and subsequently printed in the BUFFALO MEDICAL JOURNAL. Briefly, this procedure consists of the following requirements: (1) posture and flexion of the body: (2) steady dilatation of the urethra by the continuous presence of a hot saline solution. This is accomplished by means of a short double canula; the outflow is smaller than the intake, the canula being connected with a fountain fifteen or twenty inches higher than the pelvis. This method of procedure incites a vermicular, a retroperistaltic action. Civiale, McNamara and Ott have alluded to this phenomenon without applying it to practical use.

Permanganate of potash in large dilution produces good results as a flushing agent. Half a drachm of Condy's fluid, increased to a drachm, to the pint of water, neutral sulphate of quinine, a grain to the ounce, may be used. Nitrate of silver, one-sixteenth grain to the ounce, and perchloride of mercury, one part in 10,000, are valuable remedies. The mercury sometimes produces great pain, which may be relieved by refilling the bladder with a strained solution of the albumin of an egg. A weak solution of sodium chloride will relieve the irritation following the use of nitrate of silver. These remedies are to be used with great caution when irrigating the bladder. Diluted milk may be used in place of the egg albumin. Borolyptol, hydrozone, glycozone, hydrate chloral, one part to two of biborate of soda, a teaspoonful to the pint of water, campho-phenique, ichthyol with glycerine, chlorinated soda and methylene blue, are valuable irrigants in cystitis and urethritis.

Internal remedies are valuable adjuncts in the treatment of bladder and urethral disease. The vegetable oils, sandal wood, copaiba, cubebs, together with kova kova, triticum, saw palm and others.

Eucalyptol, wintergreen, boric acid and salol are administered to render the urine sterile. The late Dr. Palmer, of Louisville, demonstrated that boric acid, in ten to fifteen grain doses, usually inhibited urethral rigors and fever. Borocitrate of magnesia has a remarkable effect in sterilising and clearing purulent urine. Dose is a teaspoonful. Benzoate of sodium and salicylate of sodium āā fifteen grains to a dose in combination and given three times daily, in an ounce of chloroform water, and hyposulphite of sodium in fifteen grain doses are valuable remedies for clearing purulent urine. The reaction of the urine is the chief guide in urinary therapeusis.

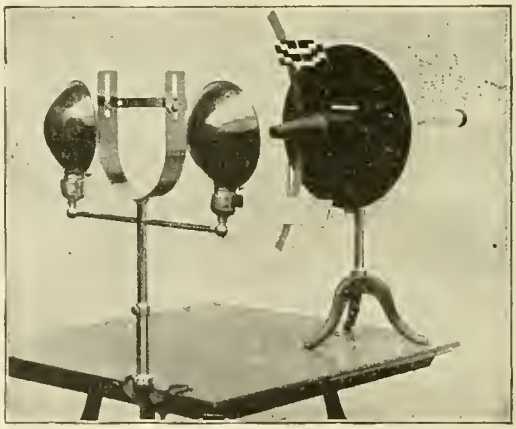
NEW INSTRUMENT.

THE JAVAL OPHTHALMOMETER—SATTERLEE'S MODEL.

By RICHARD H. SATTERLEE, M. D., Buffalo, N. Y.

NINETY-EIGHT per cent. of astigmatism is corneal. Astigmatism is a frequent cause of reflex disturbances. The ophthalmometer is the only instrument that will determine the existence or absence of astigmatism without depending entirely upon the intelligence of the patient.

The objection to the Javal-Schiötz ophthalmometer, or its American copy, has been its cost, its size, and the number of lens surfaces, making very bright illumination of the mires necessary.



SATTERLEE'S MODEL OF THE JAVAL OPHTHALMOMETER.

In the model illustrated the number of lens surfaces have been decreased, making it possible to use the instrument by daylight, and lessening the cost of the instrument.

The Javal, as ordinarily constructed, is too unwieldy to transport. This instrument has been constructed so that it can be taken apart and will go in an ordinary grip.

The instrument is made for the Buffalo Ophthalmometer Co. of this city. Address P. O. Box 34, Buffalo, New York.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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UNIVERSITY OF BUFFALO.

ANNUAL COMMENCEMENT OF MEDICAL, PHARMACAL AND DENTAL DEPARTMENTS.

THE University of Buffalo observed the fifty-second anniversary of its medical department with its annual commencement exercises on Tuesday, April 26, 1898, at which 166 graduates in the three departments of medicine, pharmacy and dentistry received their diplomas. The curators of the university met in the forenoon to listen to the questions that the faculty propounded to the classes in their presence, and to formally recommend the candidates to the council for degrees.

ALUMNI ASSOCIATIONS.

The alumni association of the medical department held its twenty-third annual meeting in Alumni Hall of the college building in the afternoon of commencement day.

The president, Dr. D. A. Currie, '64, of Englewood, N. J., called the meeting together promptly at two o'clock. The members in large numbers from different sections of the country registered their attendance. Among the older alumni were Drs. A. G. Ellenwood, '48, of Attica; C. C. Wyckoff, '48, of Buffalo; Thomas D. Strong, '51, of Westfield; William Warren Potter, '59, of Buffalo; George M. Palmer, '65, of Warsaw; R. J. Menzie, '66, of Caledonia.

The election of officers for the ensuing year resulted as follows: President, Dr. Z. J. Lusk, of Warsaw; first vice-president, Dr. William Warren Potter, of Buffalo; second vice-president, Dr. M. A. Veeder, of Lyons; third vice-president, Dr. E. G. Hoitt, of Marlborough, Mass.; fourth vice-president, Dr. W. R. Campbell, of Niagara Falls;

fifth vice-president, Dr. A. W. Hinkly, of Rochester; permanent secretary, Dr. E. L. Frost; recording secretary, Dr. N. V. Chappell; treasurer, Dr. H. U. Williams. On the board of trustees, Dr. D. A. Currie was elected to succeed Dr. Joseph Fowler, whose term expired. The trustees are Drs. Julius Wenz, of Lancaster; H. P. Trull, of Williamsville; C. A. Wall, William C. Phelps, of Buffalo; and D. A. Currie, of Englewood, N. J. Dr. A. T. Kerr was elected a member of the executive committee, which consists of the following-named: Drs. Albert T. Lytle, Grover W. Wende, A. T. Kerr, Z. J. Lusk and John Parmenter, the last two *ex officiis*.

After the business session was terminated, the president, Dr. Currie, delivered his address, entitled, Living and dying; their physics and psychics. This scholarly address attracted close attention and received, as it merited, enthusiastic applause. It is impossible to do justice to it in a brief abstract. In his opening paragraph he referred to the mystery of life and spoke of the little the researches of science had done toward the solution of the mystery. The length of human life was referred to, both of the antediluvian age and the present.

He said: "Before the flood the physical constitution was complete and its vital functions were perfect. We cannot solve the problem of the long lives of men of that period. They retained health and vigor of the body through many centuries, and, as far as we know their history, we have no intimation that sickness was known. Considering man as he now is, the most distinguished physiologists of our times are agreed in the opinion that three score years and ten is the average and 100 years is the extreme limit of life." The manner in which death acts and its signs from a medical viewpoint were discussed at length.

Dr. Currie illustrated his statements by reference to authorities in medical science and also the literary world, quoting liberally from both. In regard to the sensations at the time of death, Dr. Currie did not hold the opinion that they are painful. He said: "We are not necessarily born to suffer. All natural conditions, more or less, are sources of pleasure. Our physiological nature is such that the last phenomena in natural death are the same as those of sleep. The difference between sleep and the act of dying is, one is temporary, the other is for all time."

In closing, the speaker touched upon the spiritual aspect of the end of life, saying: "The union of the body and soul is a mystery. When we see the bond finally and completely severed, we stand in silent wonder."

The scientific part of the program was next taken up and Dr. Daniel Lewis, of New York, president of the state board of health, introduced for consideration the subject of cancer, with a short but pointed and exceedingly well-presented address, entitled, The precancerous stage. We hope to publish his remarks in full in an early edition of the JOURNAL. Dr. Roswell Park discussed the subject from the viewpoint of infection and Dr. Woods Hutchinson generalised in a few remarks, distinguished for their graceful rhetoric.

Dr. E. M. Houghton, of Detroit, then presented a paper, entitled, Antitoxic serum, which was an admirable setting forth of the present status of serum therapy. The remainder of the program, as published in the announcement, is as follows: *Diphtheria*: Community sanitation and laws, Dr. Frank A. Jones, Rochester; discussion, Dr. Walter D. Greene, Buffalo. Personal sanitation, Dr. John Foote, Lockport; discussion, Dr. Henry R. Hopkins, Buffalo. Bacteriology, Dr. George M. Palmer, Warsaw; discussion, Dr. William G. Bissell, Buffalo. Morbid anatomy, Dr. Melville C. Follett, Olean; discussion, Dr. Herbert U. Williams, Buffalo. Symptoms, Dr. Robert J. Menzie, Caledonia; discussion, Dr. DeLancey Rochester, Buffalo. Diagnosis, Dr. S. R. Cochrane, Medina; discussion, Dr. Charles G. Stockton, Buffalo. Medical treatment, Dr. Frederick F. Hoyer, Tonawanda, Dr. Rollin T. Rolph, Dunkirk; discussion, Dr. Irving M. Snow, Buffalo. Surgical treatment, Dr. Charles H. Richmond, Livonia, Dr. Selden J. Mudge, Olean; discussion, Dr. George F. Cott, Buffalo.

Owing to the lateness of the hour it became necessary to modify the foregoing schedule, omitting some of its details. When the hour for adjournment came it was the general sentiment of those present that the meeting had been most interesting and profitable.

The annual meeting of the alumni of the dental department was held Tuesday afternoon, April 26th, at the college. Dr. T. G. Gibson was elected president, Dr. William Bartlett, vice-president, and Dr. H. T. Squire secretary and treasurer. Immediately following the conclusion of the commencement exercises of the class, the alumni gathered around the banquet table at the Iroquois.

The alumni association of the department of pharmacy held its annual meeting Wednesday, April 27th, at the college. There was a business meeting in the morning and in the afternoon W. C. Alpero, of New York, delivered an address. In the evening the association held its banquet at the Genesee.

THE EVENING AT MUSIC HALL.

The graduating exercises began at Music Hall at 8 o'clock. The seats in the center had been reserved for graduates, who marched to their appropriate places, clad in caps and gowns, to tuneful strains from Kuhn's orchestra. The faculty and council took their seats upon the stage and the Rev. O. P. Gifford opened the exercises with prayer. Dr. John Parmenter, secretary of the medical faculty, presented the class; Dr. Matthew D. Mann, dean of the medical faculty, administered the Hippocratic oath, and then the chancellor, Hon. James O. Putnam, in well-formulated words, conferred the degrees. The dean announced that the thesis of Julius Samuel Berkman, on the subject of Addison's disease, and also that of Nelson W. Wilson, on Sunstroke, had been found worthy of honorable mention and were also to be bound and placed in the college library for reference. Theses of the following-named were mentioned: Joseph L. Howell, Richard J. Gould, Gifford Truesdell, Clifford R. Orr and Homer J. Knickerbocker. Thomas H. McKee, Abram L. Weil, Ray K. Barry and Edith Winifred Stewart secured averages above 90 per cent. during their course of study.

Class in Medicine.—Alexander Allan, Buffalo, N. Y., Robert Marion Andrews, Bergen, N. Y.; M. Louis Bacon, Buffalo, N. Y.; Frederick C. Ballard, Centerville, N. Y.; Ray K. Barry, Willink, N. Y.; A. Austin Becker, Rochester, N. Y.; Julius Samuel Berkman, Bath, N. Y.; William J. Bott, Buffalo, N. Y.; Charles Bigelow Braman, Buffalo, N. Y.; Clayton A. Button, Holland, N. Y.; Annie May Cheney, Franklinville, N. Y.; John C. Cleary, Clyde, N. Y.; Georgia Cruickshank, Buffalo, N. Y.; Arthur I. Eccleston, Kent, N. Y.; Frederick W. Filsinger, Buffalo, N. Y.; John Robert Bruce Glasgow, Montezuma, N. Y.; Scott D. Gleeten, Waterford, Pa.; Richard J. Gould, Lockport, N. Y.; Herbert I. Harris, Buffalo, N. Y.; John L. Hazen, Penn Yan, N. Y.; Joseph Lewis Howell, Newton, N. J.; H. Francis Hunt, Clark, N. Y.; Harry B. Huver, M. D., D. D. S., Williamsville, N. Y.; Edwin Will Janes, A. B., Randolph, N. Y.; Irving R. Johnson, St. Catharines, Ont.; John N. Jones, Erin, N. Y.; Henry Joslyn, Buffalo, N. Y.; Thos. A. Killip, Rochester, N. Y.; Homer J. Knickerbocker, Ph. G., Elba, N. Y.; Caroline Lichtenberg, Buffalo, N. Y.; Thomas H. McKee, Buffalo, N. Y.; Fred B. McKenney, A. B., Rochester, N. Y.; Jonathan Tamblyn Male, A. B., Beech Lake, Pa.; Monroe Manges, A. B., A. M., M. D., Buffalo, N. Y.; Gus A. C. Mannel, Rochester, N. Y.; Howard A. Maynard, South Butler, N. Y.; Allie Long Mitchell, A. B., East Aurora, N. Y.; William H. Mountain, Belfast, N. Y.; Charles H. North, Buffalo, N. Y.; Wilford L. Odell, Buffalo, N. Y.; Clifford R. Orr, Buffalo, N. Y.; Jacob S. Otto, A. B., Buffalo, N. Y.; Donald Parker, Stamford, Ont.; Albert Walter Phelps, North Evans, N. Y.; Alfred Percy Pierce, Buffalo, N. Y.; Charles Louell Preisch, Lockport, N. Y.; Charles Roemmelt, Elmira, N. Y.; Marie Cecelia Rotheram, Southport, Eng.; Edward Affleck Sharp, Buffalo, N. Y.; George A. Sloan, Buffalo, N. Y.; H. MacVicker Smith, Buffalo,

N. Y.; Edward A. Southall, Geneseo, N. Y.; Charles Wilson Southworth, A. B., Forestville, N. Y.; Floyd L. Spaulding, Howard, N. Y.; Peter A. Stadlinger, D. D. S., Buffalo, N. Y.; Edith Winifred Stewart, Hume, N. Y.; Walstein M. Tompkins, New York, N. Y.; Gifford Truesdell, Warsaw, N. Y.; Emory M. Wadsworth, Warsaw, N. Y.; Louis Talcott Waldo, Berkshire, N. Y.; Abram L. Weil, Buffalo, N. Y.; Nelson W. Wilson, Buffalo, N. Y.; Loretta E. Wooden, Rochester, N. Y.

Dr. John R. Gray, secretary of the faculty of pharmacy, presented the candidates in that department. Two members of the class, James A. Howland and Mark M. Minor, were entitled to the degree of master in pharmacy. Thirty-one members received the degree of graduate in pharmacy and three received certificates of examination which will entitle them to diplomas on their attaining the required age.

Nelson M. Wiegand won the William H. Peabody prize, having maintained the highest average in the class during the course. James A. Howland secured the advanced course prize. Frank T. Dewey, of the junior class, received the faculty junior prize. Honorable mention was made of the following: Nelson M. Wiegand, Mark H. Minor, Orlando M. Baker, Otto H. Salchow and James A. Howland.

Class in Pharmacy.—James Albert Howland, Mark Manchette Minor, Frank J. Babcock, Orlando Merriam Baker, John Henry Bradley, Frederick Henry Coon, Clarence Robert Cox, Franklin Seth Cushing, Gustave A. Gamenthaler, Fred Leroy Gibbs, Lawrence E. Green, Luke Frank Harvey, Arthur Homer Hennage, James Erwin Jones, George Burnett Kerr, Samuel Kavinoky, Peter Klingler, Merrick T. Marcy, Albert V. Mentz, Agnes Magelene Murray, Bartholomew E. Oats, William J. O'Shaughnessy, George B. Parkinson, Boris Reinstein, James Peter Rooney, Frederick A. Rudolph, Otto Henry Salchow, Ernest Frederick Slater, Charles Barton Skinner, Arthur Nelson Smith, Henry W. Veith, David George Wallace, Thomas Frederick Williams.

The following-named, having met all requirements, except that of age, received certificates of examination: Herbert Roy Edmonds, Reynold A. Janke, Nelson McKay Wiegand.

The class in dentistry was presented by Dr. A. P. Southwick, secretary of the dental faculty. Dr. W. C. Barrett administered the oath of the profession of dentistry. The honor roll, as read by Dr. Southwick, comprised those whose averages during their entire course of study had exceeded 90 per cent. They were Josephine H. Spillman, Grace G. Rankin, Miles M. Smith, Edward L. Schlottman, Clinton H. McCallum, Robert Murray and George M. Decker.

Class in Dentistry.—George Washington Averell, Edward Barber, Edgar Atheling Bartlett, Charles Wesley Borland, William Arthur Bostwick, Byron Alfred Brown, George Brown, Jacob Harry Brown, Charles Felix Buckland, Harry Dayton Burghardt, Egerton Bidwell Cays, Claude Robert Christopher, John

Emerson Cole, Arthur Herbert Consaul, Herschel Jacob Cull, Harry Washington Day, George Martin Decker, William Brown Dills, Kernon James Donahoe, John Lockhart Dudley, Moss Burton Eshleman, Raymond Reece Evans, Frank Leslie Frank, Katharine Magdelena Graf, Allen Lewis Green, John Nickels Hanna, Albert Devitt Heist, Harry Collins Howell, George Washington Jones, Albert Hugh Jung, Otto Charles Kalbfleisch, Henry Wilford Kitching, Charles Henry Laborn, Christian Albert Landel, Clarence Edward Lauderdale, Clinton Henry McCallum, Arthur Amzi Mix, Herbert Butler Morris, Robert Murray, Judson Hedden North, George Albert Northrup, William Wilton Paull, John Robert Quigg, Harry Budd Randall, Grace Greenwood Rankin, Howard Frank Redfield, Earnest Emerson Rice, Samuel Emerson Salisbury, Edward Leonard Schlottman, William Francis Sheahan, William Derwood Slacer, Miles Montaine Smith, Josephine Harriett Spillman, Louis Almon Squires, Ph. B., Ella Amanda Staley, George Stevenson, Duncan Stewart, Eli J. Sweet, Charles Dickinson Tefft, John Clarence Burroughs Tooke, George Carman Van Marter, Francis Harold Wallace, Louis Eidt Wettlaufer, Jay Leonard Wilson, Fred Arthur Woodman.

The Rev. Mr. Gifford addressed the graduates. His address was very interesting and he frequently was compelled to pause on account of the laughter his witty words provoked.

THE BANQUET.

The annual banquet of the alumni association was given at the Ellicott Club. At eleven o'clock the strains from Marcus's orchestra announced that dinner was served, whereupon the faculty, alumni and guests marched into the beautiful banquet hall of the Ellicott Club, and took their seats in groups at small tables that were handsomely decorated. At a large round table, decorated with red lights, yellow tulips and ferns, were grouped the president of the alumni, Dr. D. A. Currie, with Mr. Adelbert Moot and the Rev. Charles C. Albertson on his right and left respectively. Others at the table were: Dr. Daniel Lewis, of New York, Dr. Matthew D. Mann, Dr. H. M. Hill, Dr. Charles G. Stockton, Dr. Ernest Wende, Mr. John B. Olmsted, Dr. W. D. Greene, Dr. Delancey Rochester, Dr. H. G. Matzinger, Dr. H. U. Williams and Dr. William Warren Potter. The quality of the dinner was beyond criticism, and when coffee and cigars were served the speaking commenced. Dr. Currie acted as toastmaster, sending forth each speaker with a few bright and appropriate remarks. The following is the list of toasts and speakers: The University of Buffalo, Adelbert Moot, Esq.; State sanitation, Daniel Lewis, M. D.; Medical men and ministers, Rev. Charles C. Albertson; The man of the medicine case, Annie May Cheney, M. D.; The patient, John B. Olmsted, Esq.; The conquest of medical superstition, Alice Ross Bennett, M. D.; Ninety-eight, John Livermore Hazen, M.D.

At a late hour the company separated, speaking words of praise for the delightful entertainment, all of which were well deserved by the committee of arrangements, headed by Dr. Albert T. Lytle as chairman.

AND WAR CAME.

WHEN, last month, we wrote of the possibilities of war, still in the hope and belief that it would be averted, we little thought that in spite of the exercise of a wise and conservative diplomacy by the Executive at Washington, hostile batteries would be blazing along the northern coast of Cuba before this edition of the JOURNAL went to press. Nevertheless, such is the fact, and the people of the Republic are thoroughly aroused to all the conditions that belong to the environment of dreadful war.

The time has passed for discussion or argument with reference to the justice of our cause. That has been settled by those whose duty it is to decide such questions. Most of us will quite agree with Mr. Henry Watterson in his brilliant speech at the celebration of General Grant's birthday, in New York, on the 27th of April, when, in an outburst of haughty eloquence, he asserted that

We want no other warrant for our act of war than the cruel, the heartless story of the Spaniard in America, from the coming of Cortez and Pizarro to the going of Weyler—three centuries of brutality, irradiated only by the pirate's lust for plunder and the tiger's thirst for blood—each succeeding captain-general has seemed to emulate Alva as a rival of Satan by seeking a second immortality of damnation. Before such an array, historical and contemporary, the true American neither consults his geography nor counts the cost. His pulse-beats are the same in Massachusetts and in Mississippi, and whether the band plays "Yankee Doodle" or "Dixie" is all one to him.

Our purpose, however, in introducing the subject at this time is to briefly discuss some of the medical aspects of the war. It seemed at first probable that it would result chiefly in conflicts upon the high seas; but more recent developments indicate that it will principally be a land war and that the army, rather than the navy, will sustain the chief burden of the conflict. It would appear like good strategy to land a force in Cuba, sufficiently strong to maintain a foothold and to furnish the insurgents with commissary and ordnance supplies, as well as to feed the reconcentrados. If this should prove the policy it will compel Spain to come across the ocean to engage

our fleet, and this will put her at a disadvantage with reference to coal and ammunition—two principal commodities in naval warfare.

Our army in Cuba in such event will furnish the chief work for the medical staff, whether from sickness or casualties of battle. Sickness is always the main drawback to the progress or success of an army. It is important that its medical staff shall be composed of efficient men, strong in character, large in experience, skilled in diagnosis and treatment, and equipped with adequate sanitary and hygienic knowledge. It is true they are called surgeons, but it is only exceptionally they are called upon to use the knife, the exercise of which in battle is permitted to only the few of known aptitude for surgical work, and whose surgical judgment can be relied upon. The medical staff of the army will be called upon to exercise the larger functions of physicians every day, but only now and then those of surgeons. How important, then, that the selections for these responsible places should be made with due caution and after careful examinations! In the State of New York, we have no doubt, the state license will be accepted as an evidence of professional proficiency; but we are sure that it becomes the duty of the state to establish a proper medical examination for all other applicants for commissions as medical officers. That this should be done under the direction of the regents of the University is an asseveration that does not permit of justifiable dispute.

Finally, we do not share in the somewhat generally expressed fear of the danger of yellow fever. Surgeon-general Sternberg is an expert regarding the infection of this disease, and Surgeon-general Van Reypen has also had large experience in its management. Supervising Surgeon-general Wyman is also at the head of a medical corps containing many experts on the infection and management of yellow fever. The combined skill of these men will be brought to bear on the proper sanitation and hygienic care of our military and naval forces in and about Cuba. The proper selection of camp sites, good water supply, ample drainage, personal hygiene, the isolation of infected cases—all these will deserve and receive the most skilful and serious attention of the constituted heads of the medical departments of the three services. Let the government at Washington see that only competent subordinates are commissioned to support them and to execute their orders, and then we believe there will be no serious inroads made upon our forces by yellow fever or any other calamitous disease.

THE BUFFALO EXPRESS very properly advocates the abatement of street nuisances, such as peddlers, organ grinders, beggars and canvassers. We quite agree with our contemporary, and would suggest as an amendment to its plaint, that a city, no matter how fortunately situated as regards geography, cannot make solid progress unless it keeps its streets clean and suppresses unnecessary noises. Both of these conditions are so essential to health and comfort, that desirable permanent residents will not be attracted to a city that does not scrupulously maintain them. It is far from pleasant to be aroused at half-past four or five o'clock in the morning twice a week, by the rattling trucks of the garbage collectors that invade one's premises when sleep is sweetest. Furthermore, it is inexcusable for a city to add to the interminable din of the early morning factory whistles by permitting its fire tug to belch forth its unearthly screeches, the only purpose of which can be to delight the appetite of its officers for noise.

PERSONAL.

DR. JAMES W. MCLANE, who for thirty years has been Professor of Obstetrics at the College of Physicians and Surgeons, the medical department of Columbia University, has resigned his teaching chair, but retains his place as dean of the medical faculty. Dr. McLane is the type of men that not only ornament the medical profession but who increase confidence in the guild. The medical department of Columbia can ill-afford to part with him. The vacancy thus created has been filled by the appointment of Dr. Edwin B. Cragin as lecturer in obstetrics. Dr. Cragin is a graduate of Yale and of the College of Physicians and Surgeons, and in his positions at the Roosevelt and Cancer Hospitals he has manifested conspicuous ability. In his new position he will have professional charge of the Sloane Maternity Hospital, connected with the College of Physicians and Surgeons, and he will also have entire direction of the obstetrical work of the students.

DR. ROLLIN T. ROLPH, of Dunkirk, recently appointed health officer, has, in compliance with the law, resigned as a member of the Board of Health. Dr. Rolph has also been appointed one of the non-resident staff of the Buffalo Hospital of the Sisters of Charity.

Dr. W. Scott Renner, of Buffalo, Professor of Laryngology at Niagara University, sailed on Saturday, April 23, 1898, for a three months' tour in Europe. He was accompanied by Mrs. Renner and her father and mother, Mr. and Mrs. Diehl.

Dr. E. L. Ruffner and Mrs. Jennie L. Thomas, of Buffalo, were married April 18, 1898. Dr. Ruffner has removed his office from 282 Hampshire street to 181 Allen street. Hours: 8–10 A. M., 2–3 and 7–8 P. M.

Dr. C. F. Durrand, of Buffalo, has removed from 258 Franklin street to room 403 Mooney-Brisbane building. Dr. Durrand has been appointed a surgeon on the staff of the German Hospital.

Dr. Edgar A. Forsyth, of Buffalo, who limits his practice to diseases of the nose, throat and ear, has removed from 64 West Huron street to 348 Franklin street. Hours: 9–1 and 7–8.

Dr. J. J. Finerty, of Buffalo, whose practice is limited to diseases of the eye and ear, has removed from 266 to 429 Franklin street. Hours: 9–1. Telephone.

Dr. J. Henry Dowd, of Buffalo, has removed his office from 206 to 223 Franklin street. Hours: 9–1 and 7–8; Sundays, 2–4 P. M.

Dr. L. G. Hanley, of Buffalo, has established an office at 74 Franklin street. Hours: 1–4 P. M.

Dr. George S. Palmer, of Buffalo, has removed from 316 to 280 Franklin street.

OBITUARY.

Dr. John J. Cullinane, of Buffalo, died at his home, 180 Seneca street, March 31, 1898, aged 31 years. He came to this city from Watkins, N. Y., and graduated from the Buffalo University medical college in 1893. He was afterward appointed a member of the Fitch hospital staff. Subsequent to service in that capacity, he

established himself in private practice and was one of the prominent young members of the profession. A promising future was suddenly terminated through his brief illness and death, the cause of which was attributed to acute pneumonia. His remains were taken to Watkins, N. Y., for interment, where his parents reside.

ARMY AND NAVY NOTES.

It is announced that the secretary of war has made an allotment to the surgeon-general of the army of $20,000 out of the $50,000,000 emergency appropriation, to be used in the purchase of medical and hospital stores for the use of the army in the field in case of hostilities. The principal want of the medical department during extensive field operations is hospital stores, such as cots, blankets and ambulances. It is stated that the war department made an allotment on the 16th of April of $25,000 for the complete equipment of an army hospital at Key West.

Surgeon-General Sternberg, of the army, is negotiating for a large merchant vessel to be used as a floating army hospital to be stationed in the harbor selected as the base of supplies for the army operating against Cuba. The vessel is to be equipped with 500 beds and many of the contrivances now being installed in the naval ambulance ship Solace. Unlike the Solace, however, she will be stationary most of the time, except when it may be necessary to transport the sick and wounded to American ports. The Fall River line has offered its steamer Providence in this capacity.

A bill was recently introduced into the house of representatives providing for the appointment of fifteen additional assistant surgeons to the army with the rank of first-lieutenant. The bill further authorises the surgeon-general to appoint as many assistants in case of war as he deems necessary, the salary of each not to exceed $150 a month.

It has been asserted that the navy department would not accept the services of women as nurses. In contradiction of this statement, it is announced that surgeon-general Van Reypen has accepted the proffer of the services of twenty nurses offered by the Graduate Nurses Protective association, a regularly incorporated body of the state of New York. It is understood that these nurses will be assigned to

duty on board the hospital steamer Creole, renamed the Solace, recently purchased of the Cromwell line. The uniform of these nurses will consist of a navy blue India silk waist and skirt with a white apron.

THE BOARD of naval inspectors at the naval hospital, Brooklyn, has received a large number of applications for the vacant places as acting assistant surgeon, of which there are 26. About 600 men have applied for places and as soon as the bill now before congress authorising the increase in the force becomes a law, the examinations will begin.

COL. C. R. GREENLEAF, Assistant Surgeon-General U. S. Army, lately stationed at San Francisco, has been ordered to Washington for duty on the staff of General Miles.

SURGEON-GENERAL STERNBERG has had applications for appointment from over 1,200 persons in the medical profession. The Surgeon-General, however, thinks the regular army medical corps is adequate for all present purposes. In the event of the occupation of Cuba, the department will endeavor to obtain physicians who are immune to yellow fever.

LIEUTENANT MCKETHAN has finally been ordered to the command of the naval ambulance ship Solace. It has been difficult to obtain a commander for her as officers were anxious to serve in a more active capacity. Nevertheless, Mr. McKethan may find that he is serving his country quite as honorably on board the Solace as he could elsewhere. She was expected to take on stores at Norfolk, and after inspection by Surgeon-general Van Reypen to sail Wednesday, April 27th, for Admiral Sampson's fleet. The following medical officers have been ordered to the Solace: Passed Assistant Surgeons, B. T. Smith, C. F. Stokes, George Tucker Smith and Edward S. Bogert, Jr. They will be under the charge of Surgeon Thomas Streets.

SOCIETY MEETINGS.

THE Ohio state medical society will hold its next annual meeting at Columbus, May 4, 5 and 6, 1898, under the presidency of Dr. William H. Humiston, of Cleveland. An address on medicine will be deliv-

ered by Professor Hobart Amory Hare, M. D., of Philadelphia, and one on surgery by Professor Nicholas Senn, of Chicago. Reduced railway fares and hotel rates are offered, as well as a number of social functions, which, added to a fine scientific program, should secure a large attendance.

THE Buffalo Academy of Medicine held meetings during the month of April as follows:

Section on Surgery.—Tuesday evening, April 5th, program: Two common forms of pyelitis, by Dr. J. Henry Dowd; Exhibition of specimens, by Dr. H. U. Williams; Lantern exhibitions of pathological specimens, also stereopticon views of diseases of the heart, by Dr. H. R. Gaylord, of Philadelphia.

Section on Medicine.- Tuesday evening, April 12th, program: State aid for the incipient consumptive, by Dr. J. H. Pryor; Myocardial changes; early diagnosis and prevention of further development, by Dr. H. C. Buswell.

Section on Pathology.—Tuesday evening, April 19th, program: The scientific choice of fabrics for underwear, by Miss Mary Forster, of Newnham College, England; Some pathological findings in the blood; Exhibition of slides and drawings, by Dr. A. E. Woehnert.

Section on Obstetrics and Gynecology.—Tuesday, April 26th: The meeting of this section was postponed on account of the commencement of the medical department of the University of Buffalo.

THE section of materia medica and therapeutics of the American Medical Association, that will meet at Denver, June 7 to 19, 1898, under the chairmanship of Dr. John V. Shoemaker, of Philadelphia, publishes an elaborate and interesting program. Dr. Willis G. Gregory, of Buffalo, will read a paper before the section, entitled, The relation of pharmacal legislation to pharmacal education.

THE Lake Erie Medical Society held its regular meeting at Dayton, N. Y., Tuesday, April 26, 1898. The following was the program: Urethritis and stricture, Dr. B. C. Johnson, E. Utica street, Buffalo, N. Y.; Cystitis and irritable bladder, Dr. R. T. Rolph, Dunkirk, N. Y.; Prostatitis and senile hypertrophy, Dr. A. D. Lake, Gowanda, N. Y.; Pyelitis, Dr. S. S. Bedient, Little Valley, N. Y.

The Iowa State Medical Society will hold its forty-seventh annual meeting at Des Moines, May 18, 19 and 20, 1898, under the presidency of Dr. Edward Hornibrook, of Cherokee. The secretary is Dr. James W. Cokenower, of Des Moines.

The Michigan state board of health will celebrate the quarto centennial of its establishment at Detroit, August 9–11, 1898. On the invitation of Governor Pingree and the health department, Dr. Ernest Wende, health commissioner of Buffalo, will read a paper on the municipal prevention of disease. Extensive preparations have been made for the entertainment of guests, and the interest of the occasion will be greatly enhanced by the fact that the conference of state and provincial boards of health will be held at Detroit during the same period.

COLLEGE AND HOSPITAL NOTES.

Niagara University Medical College will hold its annual commencement on Wednesday, May 11, 1898. The alumni association will meet in the morning, at which time an address of welcome will be delivered by Dr. John A. Miller, Ph. D., on the part of the faculty. The annual address of the president of the alumni association will be delivered by Dr. F. W. Maloney, of Rochester. The afternoon and evening programs will be as follows: Some remarks about incipient orthopedic cases, M. Hartwig, M. D.; Movable kidney, Wm. G. Ring, M. D.; Pathogeny of an epileptic fit, L. Pierce Clark, M. D., Craig epileptic colony, Sonyea, N. Y.; paper by L. J. McAdam, M. D., Buffalo.

Graduating exercises, Concert Hall, at 8 o'clock. Addresses by Rev. C. C. Albertson and Dr. Eugene A. Smith. Alumni banquet at the Genesee.

Physicians and all interested are cordially invited to attend these exercises.

The medical department of Cornell University has been established in the city of New York, with a faculty made up principally of teachers from the New York University medical school. The establishment of this new medical school has been rendered possible by the munificence of Col. Oliver H. Payne, one of New York's multi-

millionaires, who has presented Cornell with gifts aggregating half a million dollars in buildings, and with a considerable standing fund besides. It is expected that the doors of the new medical college will open next fall; and, as in other departments of Cornell, women will be admitted on the same terms as men.

THE Philadelphia Polyclinic and College for graduates in medicine will devote a special week to the teaching of internal medicine and clinical diagnosis, beginning May 9 and ending May 14, 1898. The college building is at 1818 Lombard street and the fee for the course is $15.

Book Reviews.

DISEASES OF THE STOMACH. Their special pathology, diagnosis and treatment, with sections on anatomy, physiology, analysis of stomach contents, dietetics, surgery of the stomach, etc. In three parts. By JOHN C. HEMMETER, M. B., M. D., Philos. D., Clinical Professor of Medicine at the Baltimore Medical College; Consultant to the Maryland General Hospital, etc. Royal octavo, pp. xvii.—788. With illustrations, some in colors, and a lithograph frontispiece. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

The first part of this treatise is devoted to a consideration of the anatomy and physiology of the digestive organs, together with the methods and technics of diagnosis. The author briefly deals with the anatomy of the stomach in chapter one, and with its histology in chapter two. The latter chapter is chiefly an extract from Mr. Bensley's conclusions in his paper read to the Canadian Institute in 1896. Mr. Bensley's drawings with reference to the gland cells of the cat's stomach are both original and interesting. The small intestine forms the subject of the third chapter, and this is a section of the digestive tract that always possesses interest, because of the liability to cancerous changes at the junction of the pylorus and duodenum.

The physiology of digestion is taken up in the fourth chapter, together with methods and technics of diagnosis, and its consideration is continued during its several phases until the end of this part. In regard to technics, Hemmeter has some methods peculiar to himself, one of which he designates as Hemmeter's method for testing absorption, which he describes in the tenth chapter, page 93. The author is especially interesting in his description of the use of the stomach-tube, having himself devised some modifications in its accessories.

In the second part the author considers the therapy and materia medica of stomach diseases. He very properly lays great stress upon dietetic treatment of gastric diseases, giving elaborate tables of

dietetics and amply prepared diet lists. The effects of cooking on food are not very well understood by the average cook, and it is desirable that persons suffering from stomachal diseases should derive the utmost benefit from a carefully arranged diet list and properly cooked food. Hemmeter gives due weight to these important branches of his subject. He also discusses at considerable length the uses and abuses of natural mineral waters in digestive disorders. The majority of laymen and only a moderate ratio of physicians give much consideration and less scientific thought to this important question. Fashion, fad, predilection—all these and many other equally unscientific reasons are allowed to govern the choice of springs, whereas this should be a subject of quite as much thought as any branch of therapy relating to gastro-intestinal disturbances.

The surgical treatment of organic gastric diseases is discussed in chapter seven, where pylorectomy is advocated in carcinoma and some other affections as the only operation likely to make definite cure or recovery of some duration possible. Haberkant's tables are given, and these merit careful study. The author next proceeds to consider the influence of gastric diseases upon other organs and on metabolism ; and in chapter nine he considers the blood and urine in stomach diseases.

The third part of this treatise, which comprises about one-half of the volume, is allotted to what the author calls the gastric clinic. In it he considers all the special diseases of the stomach, such as gastritis, gastric ulcer, tuberculosis and syphilis of the stomach, benign tumors, motor insufficiency, enteroptosis, neuroses of the stomach, etc., etc. Hemmeter will be found especially interesting in this part of his book, and he is to be credited with considerable originality in his treatment of the subjects, as well as skill in the form of presenting them. He has been careful to enumerate the bibliography of the various portions of his treatise, which is attached to the several chapters as the text progresses.

An index of authors and of subjects, both well prepared, brings to a close this exceedingly interesting and useful volume. It is the most elaborate treatise yet presented to the profession upon diseases of the stomach, and will easily become a text-book in colleges. Hemmeter, Einhorn and Ewald are the standard modern treatises upon the stomach and its diseases, but where only one can be afforded, the student or practitioner can make no mistake in choosing Hemmeter. The publishers have made it an attractive volume in its mechanical make-up.

The International Medical Annual and Practitioner's Index. A Work of Reference for Modern Practitioners. Sixteenth year. New York: E. B. Treat, 241–243 W. 24th street. 1898.

The sixteenth annual volume of the Medical Annual, which has just appeared, is on the same lines which have already met with the approval of hundreds of physicians the country over. Besides reviewing the progress of medical science from year to year, special

articles on subjects which require bringing up to date, and concerning which it is desirable to have direct information from those who by their special experience are in a position to afford it, are added, thereby enhancing greatly the value of the annual to the busy practitioner.

In this volume the review of therapeutic progress and dictionary of new remedies is carefully gone over by William Murrell, M. D., M. R. C. P. No great novelty in the domain of pharmacology and therapeutics has appeared during the past year. The author does not believe that the treatment of diphtheria by antitoxin is making the advance that was anticipated, partly because there is no guarantee —except in Germany—that all antitoxins are standardised in the same way. The greatest progress doubtless has been made in the applicability of the thyroid gland in practical medicine. Myxedema, obesity, some forms of insanity, skin diseases and myopathies have all been greatly benefited by this product.

An interesting article by A. D. Rockwell, of New York, follows, on electro-therapeutics. The author says, in beginning his chapter, that the value of electricity in neurasthenia is but indifferently appreciated, even by the neurologist. The value of the Röntgen rays is commented on, especially in their ability to diagnosticate renal and vesical calculi. Hypnotism and suggestion, though somewhat threadbare, are treated of by Charles Lloyd Inckey. Nothing new or original is brought out in this essay. The dictionary of new treatment in medicine and surgery takes up the major part of the volume and contains some valuable short contributions, such as The consideration of ear diseases, by J. Dundas Grant, Insanity, by James Shaw, and Obliteration of the deformity in Pott's disease, with many full-page illustrative plates, by Robert Jones and A. H. Inbly. An atlas of the bacteria pathogenic in man, by S. G. Shattock, accompanied by a practical description of the methods of isolating and examining these disease germs, is a welcome addition to the 1898 annual.

Part III. is devoted to special chapters on various topics, as Legal decisions affecting medical men and the public health, A review of the progress in sanitary science, New instruments, New books, ending with the general index, making a handsome volume of 740 pages.

To those who possess the preceding volumes this needs no introduction; to those who don't, we can cheerfully recommend the series,

W. C. K.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1895–96. Volume II. Containing Part II. Washington: Government Printing Office. 1897.

The second part of this report, which is comprised in Volume II., deals with education in Sweden and Iceland; typical institutions offering manual or industrial training; higher and secondary education in the United States; how agriculture is taught in Prussia and

France; industrial education in Germany, Austria and Switzerland; recent efforts in Europe for the advancement and improvement of agriculture; colleges endowed by congress for the benefit of agriculture and the mechanic arts; the Bertillon system as a means of suppressing the business of living by crime; art decorations in school rooms, together with various statistics and numerous concurrent matters of interest. It gives statistics of the schools of medicine in the United States, but as these are now two years old or more, they are of little use. From the foregoing synopsis the value of this volume to the educators of the country will become apparent.

A CLINICAL TEXT-BOOK OF SURGICAL DIAGNOSIS AND TREATMENT. For Practitioners and Students of Surgery and Medicine. By J. W. MACDONALD, M. D., Graduate in Medicine of the University of Edinburgh; Licentiate of the Royal College of Surgeons, Edinburgh; Professor of the Practice of Surgery and of Clinical Surgery in Hamline University, Minneapolis, etc. Royal octavo, pp. 798. With 328 illustrations. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

The contributions to surgical literature in tomes, systems and text-books of late have been so considerable, and from authors of greater or less renown, that the reason for a new treatise at this time must be very cogent to justify its issuance. This author, comparatively unknown to fame, has undertaken to answer two questions as the *raison d'etre* of his book. They are of such supreme importance as to embrace the whole field of medical and surgical literature. The first question, as stated by the author in his preface, is, "What is the disease or injury?" The second question is, "What is the proper treatment?"

The first chapter of the book is addressed to the general examination of patients, in which, without unfolding any novelty, a concise statement of essentials is given. The next chapter tells of examination of the vascular system, which well merits the reader's careful attention. Macdonald's handling of aneurism, particularly his differential diagnosis of special aneurisms, is admirable. It is one of the most important subjects for the young surgeon to study with care.

Injuries and diseases of the osseous system are next considered in the following order: fractures, dislocations, inflammations of bone, tumors of bone and deformities. Fractures and dislocations being the commoner and easier diagnosticated injuries, we pass without comment. Macdonald becomes interesting in his treatment of inflammations and tumors of bones. Of the latter he publishes some instructive illustrations, many of which are new. Of next importance are injuries and diseases of joints, that are also dealt with systematically, concisely and with a reasonable degree of scientific accuracy.

Under the general title of injuries and diseases of the digestive system, is considered almost every known disease or injury that can attack or befall the human economy from hare-lip to imperforate rectum. This section covers nearly 200 pages and is illustrated

with many original engravings. The author is lucid in his treatment of most of these conditions. Take hernia, for instance, to which he devotes twenty pages, in which its anatomy is clearly set forth and the several operations in vogue—Championniere's, Macewen's, Bassini's, Halstead's—are clearly described and some good illustrations given to elucidate the text. Appendicitis is less elaborately dealt with, though Fowler's excellent colored plate, illustrating some of the changes observed in acute appendicitis, is introduced.

The genito-urinary system forms the subject of the next chapter, consisting of 110 pages. Naturally the general surgeon lays great stress upon stone in the bladder and the operations for its relief. Macdonald is no exception to the rule and this forms the chief point of interest in this section. Prostatitis, however, should be mentioned as receiving considerate and skilful attention.

We come now to injuries and diseases of the head, in which chapter is set forth modern methods of diagnosis and management. Cerebral tumors and epilepsy are but briefly considered, still it is always necessary to refer to monographs on these subjects, of which the recent work of Phelps is a type. Injuries, diseases and deformities of the spine next follow and these are well handled and admirably illustrated. However, here again one must consult treatises on orthopedic surgery for detailed information. A good chapter is written on diseases and injuries of the nerves, and another on diseases and injuries of the respiratory system, the latter being somewhat extensive in its dealings with the nose and throat. Next follow chapters on the diagnosis and treatment of syphilis, the diagnosis and treatment of tumors, diseases and injuries of the neck, and injuries and diseases of the breast, all of which, though short, contain much practical information.

The author next offers us a somewhat extended chapter on diseases and injuries of the female generative organs. In it he offers a few platitudes, presents some excellent drawings and illustrations, quotes the American Text-book of Gynecology on the technique of supravaginal amputation and hysterectomy and refers to Joseph Price and Bland Sutton, two excellent authorities, in regard to ectopic pregnancy. He very properly condemns the use of electricity as a means of destroying the life of the fetus before tubal rupture and asserts that nothing short of removal of the gestation sac is indicated. He is misleading and we think surgically unsound, however, when he declares that the patient may survive after rupture and the condition be palliated for days, weeks and months without surgical interference; yet in the next sentence he clears the atmosphere by asserting that the indication is to operate on all intraperitoneal cases at the earliest possible moment by abdominal section.

The final chapter deals with the Röntgen rays in surgical diagnosis and presents some very good illustrations. The book has very many excellent points, as we have indicated, and is a valuable contribution to the literature of surgery.

MANUAL OF PATHOLOGY, including Bacteriology, the Technique of Post Mortems and Methods of Pathologic Research. By W. M. LATE COPLIN, M. D., Professor of Pathology and Bacteriology, Jefferson Medical College and Pathologist to Jefferson Medical College Hospital and to the Philadelphia (Blockley) Hospital; Bacteriologist to the Pennsylvania State Board of Health. Second edition. Small octavo, pp. xxi.—638. With 268 illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1897.

This volume is the outgrowth of a series of abstracts of the author's lectures, delivered at the Jefferson medical college during the winter of 1894 and 1895. The original volume was very soon exhausted and encouraged greatly thereby, Coplin decided to revise, enlarge and complete the work and the present volume is the result. The author divides the work into three parts, Part I. being devoted to technic, Part II. to general pathology and Part III. to special pathology.

Under Part I. the author discusses the method of making post mortem examinations, the various histologic methods, microscopic examination of the urine, technic of sputum examinations, technic of blood examinations. These chapters are all well written, full, yet concise and embrace all the newer methods of microscopical research.

The chapters of Part II. deal with the degenerations and infiltrations, necroses, circulatory disturbances, inflammations, tumors, infective granulomata and a very good exposition of general bacteriology. The animal parasites, different intoxications and temperature changes are also discussed under this head.

Part III. takes up the pathology of the various organs and systems of the body, beginning with the blood.

The illustrations, 268 in number, are, as a whole, not what one might expect. Some, indeed, are excellent, but some are so diagrammatic and simplified that they convey little impression as to the real condition. This applies to some of the tumors.

On the whole, the author has succeeded in bringing forth a very laudable and instructive work and one that will find a place in many laboratories The presswork, paper and binding are good examples of the printer's art. W. C. K.

BIENNIAL REPORT OF THE DEPARTMENT OF HEALTH OF THE CITY OF CHICAGO FOR THE YEARS 1895 AND 1896. WILLIAM R. KERR, Commissioner of Health. Chicago: 1897.

This standard octavo volume comprises the reports of the health commissioner of Chicago for the years 1895 and 1896. It is divided into four parts with an aggregate of 440 pages. The first part embraces the reports of divisions and bureaus; the second part gives the vital statistics of the city of Chicago for the years mentioned; the third part is devoted to statistics and the fourth part to a chronological summary of Chicago mortality from 1851 to 1896, inclusive.

The reports of the division of contagious diseases is an interesting part of the work of the health board, and the volume contains some good illustrations. Like all municipal printing, however, it is

not properly sub-divided, nor are the page headings of subjects given. Instead thereof, across the top of each page is printed "Report of the Department of Health of the City of Chicago." It should have been paged consecutively from beginning to end throughout the several parts; an index, then, would have completed an otherwise very creditable report.

A MANUAL OF OBSTETRICS. By A. F. A. KING, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (seventh) edition. Duodecimo, pp. 573, with 223 illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers. 1898.

The appearance and exhaustion of edition after edition of this manual bespeaks in more emphatic terms than words of the hold it has taken upon both students and practitioners of the obstetric art. Dr. King builded better than he knew when he modestly put forth the first edition of his little book. It has grown steadily in favor, until there is scarcely a physician's office of any prominence throughout the breadth and length of the land in which one or more copies are not to be found. Its eminently practical character has commended it to the favor of practical physicians. We wish especially to invite attention to the excellent summary of the jurisprudence of midwifery presented in the last chapter of the book. This is a subject in which medical students usually obtain scant instruction. Obstetric teachers will do well to enlarge upon this topic.

PROCEEDINGS OF THE UNITED STATES VETERINARY MEDICAL ASSOCIATION. Session of 1897. Thirty-fourth annual meeting, held at Nashville, September 7, 8 and 9, 1897. Edited by the publication committee, W. L. Williams, Chairman, Cornell University, Ithaca, N. Y.

The importance of the science of veterinary medicine is well accentuated in the pages of this book. For thirty-four years the association has continued its annual meetings, advancing steadily from a comparatively small initiative until it has now become a great organization. Its members for the most part are men well educated in veterinary science, and this book of 272 pages is a testimonial of its scientific worth as a progressive association of veterinary surgeons.

A COMPENDIUM OF INSANITY. By JOHN B. CHAPIN, M. D., LL.D., Physician-in-Chief Pennsylvania Hospital for the Insane; late Physician-Superintendent of the Willard State Hospital, New York, etc. Duodecimo, 234 pages. Illustrated. Philadelphia: W. B. Saunders. 1898.

A compend on insanity by one who knows what to insert, and, what is more important, what to omit, has been needed for some time by the general practitioner, members of the legal profession, and by the public at large, enabling them to recognise insane tendencies and to provide intelligently for any case of insanity in the family that may demand urgent care and treatment. Chapin's compendium is just

such a book and it can be cheerfully recommended. It gives the clinical aspects of the various abnormal conditions, the treatment and management of the insane. The chapter on Morbid anatomy was prepared by J. Montgomery Mosher, of Albany, N. Y., and is lucidly stated and embraces all the newer ideas and discoveries. A chapter on medical certificates and feigned insanity adds to the value of the book.

The illustrations showing the various forms of insanity are well chosen and nicely executed. The volume is well printed and neatly bound. W. C. K.

TRANSACTIONS OF THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS. Seventh annual meeting held in Philadelphia, Pa., May 31, 1897. A. Walter Suiter, M. D., Secretary.

This brochure of seventy-eight pages contains the proceedings of the associated state medical examining boards during the seventh annual meeting, held at Philadelphia, Pa., May 31, 1897. It is a carefully prepared report of the actual business of the confederation, including addresses and papers read at the meeting, together with discussions had thereon. To these are added the constitution, the addresses of secretaries of state examining boards, and some notes of interest and information by the secretary of the confederation. While the book is full of interest, the preliminary report of the committee on minimum standards will attract chief attention. At the forthcoming meeting (Denver, June 6, 1898,) this committee will present an elaborate and well-digested report, which will claim the consideration of all thoughtful men interested in maintaining advanced standards in medical education.

The publication of this brochure in separate form is to be commended and every college teacher and state examiner throughout the country should obtain a copy.

TRANSACTIONS OF THE OREGON STATE MEDICAL SOCIETY. Twenty-fourth annual meeting, held at Portland, Oregon, June 8 and 9, 1897. William F. Amos, M. D., Secretary.

When we reflect that this is the report of the twenty-fourth annual meeting of the Oregon state medical society, the thought dawns upon us that the young and ambitious West is no longer youthful, but is getting on well toward maturer years. This modest little pamphlet of eighty-two pages contains an interesting record of two well-spent days. We congratulate our Oregon friends in having reached so substantial a stage in their medical progress.

TWENTY-THIRD ANNUAL REPORT OF THE SECRETARY OF THE STATE BOARD OF HEALTH OF THE STATE OF MICHIGAN for the fiscal year ending June 30, 1895. Lansing: Robert Smith Printing Co. 1896.

This volume contains the report of the operations of this efficient health board between July 1, 1894 and June 30, 1895. It is replete

with excellent material that will prove of interest to sanitarians, public health officers and all interested in preventive medicine. These reports are somewhat slow in making their appearance. It would seem as though their value might be increased by issuing them within the year subsequent to the period they cover. The secretary, Dr. Henry B. Baker, is one of the most efficient executive officers of any board of health within the union, and his work always tells influentially upon the prevention of disease.

TRANSACTIONS OF THE AMERICAN MICROSCOPICAL SOCIETY. Twentieth annual meeting, held at Toledo, O., August 5, 6 and 7, 1897. William C. Krauss, M. D., Secretary.

This excellent report of the transactions of this scientific society is a credit to the members and an addition of decided merit to the literature of microscopy. It contains, too, some handsome plates. The volume is somewhat less in size than last year, but it is none the less indicative of excellent work. The only regret is that it is not issued in boards, paper covers being very unsatisfactory for scientific works of reference.

BOOKS RECEIVED.

Illustrated Skin Diseases. An Atlas and Text-book, with Special Reference to Modern Diagnosis and the Most Approved Methods of Treatment. By William S. Gottheil, M. D., Professor of Skin and Venereal Diseases at the New York School of Clinical Medicine; formerly Lecturer on Dermatology in the New York Polyclinic; Consulting Dermatologist to the Orphan Asylum of the Sheltering Guardian Society; Dermatologist to the Lebanon Hospital, the Northwestern and the West Side German Dispensaries, etc. Price, per part, $1.00. Illustrated. New York: E. B. Treat & Co. 1898.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume I. Eighth series. 1898. Octavo, pp. xii.—363. Philadelphia: J. B. Lippincott Co. 1898.

Diseases of the Stomach. By William W. Van Valzah, A. M., M. D., Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic Medical School and Hospital, and J. Douglas Nisbet, A. B., M. D., Adjunct Professor of General Medicine and Diseases of the Digestive System in the New York Polyclinic. Octavo volume of about 600 pages. Illustrated. Price, cloth, $3.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

Daydreams of a Doctor. By C. Barlow, M. D. Duodecimo, pp. 251. Price, $1.25. Buffalo, N. Y.: The Peter Paul Book Company. 1898.

Proceedings of the Seventh Annual Meeting of the Association of Military Surgeons of the United States, held at Columbus, Ohio, May 25, 26 and 27, 1897. Edited by James E. Pilcher, M. D., Captain in the Medical Department of the United States Army. Secretary and editor of the Association. Columbus, Ohio.: Berlin Printing Co. 1897.

Annual and Analytical Cyclopedia of Practical Medicine. By Charles E. de M. Sajous, M. D., and 100 associate editors, assisted by corresponding editors, collaborators, and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume I. Philadelphia, New York, Chicago: The F. A. Davis Company. 1898.

An American Text-book of Genito-urinary Diseases, Syphilis and Diseases of the Skin. Edited by L. Bolton Bangs, M. D., Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York, etc., etc., and W. A. Hardaway, A. M., M. D., Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St. Louis, etc. Complete in one imperial octavo volume of over 1,000 pages. Illustrated. Prices, cloth, $7.00 net; sheep or half morocco, $8.00 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

The Johns Hopkins Hospital Report. Report in Gynecology. Volume VII. Nos. 1 and 2. Baltimore: The Johns Hopkins Press. 1898.

LITERARY NOTES.

THE BUFFALO MEDICAL JOURNAL presents itself in the present issue in an entirely new dress, the type for which was specially manufactured for it and will be used exclusively in printing its future editions. At the suggestion of the Buffalo post office we request our exchanges to address us as follows: BUFFALO MEDICAL JOURNAL, 284 Franklin street, Buffalo, N. Y.

POLK'S *Medical and Surgical Directory*, of the United States and Canada, is about to issue a new edition. Physicians who have not already furnished their names should send them at once to R. L. Polk & Company, Detroit, Mich.

THE *International Journal of Surgery* has removed to the Woodbridge Building, 100 William street, New York, where all exchanges should be sent.

THE *Iris* is the title of a book published by the students of the University of Buffalo, to be issued annually, and of which the present number is called volume I. It is a quarto volume of about three hundred pages, printed on heavy plate paper, and quite elaborately illustrated with half-tones and etchings.

The four departments, medicine, law, pharmacy and dentistry, are represented in the work, and it is edited by a committee chosen

from these departments, consisting of a board of editors and associate editors. The board of editors is composed as follows: Homer J. Knickerbocker, president; John Livermore Hazen, editor-in-chief; Walter W. Palmer, assistant editor-in-chief; Clifford R. Orr, business manager, and Edward A. Southall, artist. Associate editors: From the department of medicine, William T. Owens, George H. Davis; from the department of pharmacy, Mark H. Minar, Maurice M. Kinsey; from the department of law, John Farrell Koine, Nelson J. Palmer; from the department of dentistry, Miles M. Smith, Frank J. Biker, Nicholas C. Powers; Augustus G. Pohlman, assistant business manager; Albert B. Heist, artist from the dental department.

It is a handsome volume, a credit to all concerned in its publication, and is marred only by the fact that advertisements have been allowed a place between its covers. The presswork and engraving is by the well-known house of Matthews-Northrup Company of Buffalo, which means that it could not have been done better.

Messrs. Lea Brothers & Co. announce for early publication the following books: A manual of otology, by Gorham Bacon, A. M., M. D., professor of otology in University Medical College, New York, with an introductory chapter by Clarence J. Blake, M. D., professor of otology in the Harvard Medical school. The treatment of surgical patients before and after operation, by Samuel M. Brickner, M. D., visiting surgeon at the Mt. Sinai Hospital, New York. A text-book of dental pathology, therapeutics and pharmacology, being a treatise on the principles and practice of dental medicine, by Henry H. Burchard, M. D., D. D. S., special lecturer on dental pathology and therapeutics at the Philadelphia Dental College. The principles of treatment, by J. Mitchell Bruce, M. D., F. R. C. P., physician and lecturer on materia medica and therapeutics at Charing-Cross Hospital, London. Diseases of the nose, throat, naso-pharynx and trachea; a manual for students and practitioners, by Cornelius G. Coakley, M. D., professor of laryngology in the University Medical College, New York. Diseases of women; a manual of nonsurgical gynecology, designed especially for the use of students and general practitioners, by Francis H. Davenport, M. D., instructor in gynecology in the medical department of Harvard University. A treatise of gynecology, by E. C. Dudley, A. M., M. D., professor of gynecology in the Chicago Medical College. A text-book of anatomy, by American authors, edited by Frederic Henry Gerrish, M. D., professor of anatomy in the Medical School

of Maine. Manual of skin diseases, with special reference to diagnosis and treatment, for the use of students and general practitioners, by W. A. Hardaway, M. D., professor of skin diseases in the Missouri Medical College. Second edition. The principles and practice of obstetrics, by American authors, edited by Charles Jewett, M. D., professor of obstetrics in the Long Island College Hospital, Brooklyn.

Arsenauro and Mercauro is the title of a well-arranged pamphlet issued by the Charles Roome Parmele Company, of New York. It contains the clinical records as reported in the medical journals, resultant from the administration of these two remedies. They are supplied to the profession only through reputable druggists and are made after formulæ furnished by Dr. W. F. Barclay, of Pittsburg. These pamphlets will be supplied upon application to the publishers.

ITEMS.

The Journal Advertising Agency, of which J. MacDonald, Jr., is manager, has removed to the Woodbridge Building, 100 William street, New York.

Victor Koechl & Co., importers of medicinal preparations, such as antipyrin, lanolin, Behring's antitoxin, argonin, orthoform, etc.. etc., announce their removal from 79 Murray street to the new and modern six-story building, 122 Hudson street, corner of N. Moore street. The necessity of obtaining larger and more commodious quarters and better shipping facilities is the reason for making this change.

The name of Dr. Allen A. Jones was inadvertently omitted from the round-table group (p. 780) at the alumni association banquet of the medical association of Buffalo.

Medical Excursion in June.—(Denver to Salt Lake City.)—The medical excursion in June will leave Denver for Salt Lake City—the Zion of the new world—on the last day of the meeting of the American Medical Association and the two successive days via the Rio Grande Western Railway in connection with the D. & R. G. and Colo. Mid. lines. The rate will be but $18.00 for the round trip, offering a trip of 1,500 miles through the Rocky and Wasatch Mountains. No European trip of equal length can compare with it in grandeur or wealth of novel interest. Salt Lake City and vicinity is one grand sanitarium. The Great Salt Lake or Dead Sea of America with its magnificent bathing resort, the hot and warm springs, drives, parks, canyons and reserves are all located in or about the city. Send 2 cents to F. A. Wadleigh, Salt Lake City, for copy of pamphlet.

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THE BARBER SHOP AS A MENACE TO THE PUBLIC HEALTH.*

By A. WALTER SUITER, A. M., M. D., Herkimer, N. Y.,
Examiner in physiology and hygiene, New York State Board of Medical Examiners.

IT SEEMS that the time has arrived when the attention of this association, and through it that of public health authorities in general, should be called to that part of personal hygiene which applies to the barber shop.

It is astonishing that while the sanitary relations of most, if not all, other public occupations have been investigated to the minutest detail, and salutary restrictions, in many instances of the most rigorous character, have been imposed to protect the public interest, the first attempt to regulate the operation of the barber shop and to apply to them the rules of sanitary administration has been made within the month just past.

That this common mode of infection should have for so long escaped authoritative attention in these days of asepsis and antisepsis may be noted as one of the most contradictory circumstances of our times.

To point out the necessities for reform in this respect will be the purpose of this brief paper, and the writer does not expect to do more than furnish a text for such remarks or such action on the part of the association as will tend to bring the subject properly to the notice of local health authorities, who alone have the power to act in such premises.

Historically, the barber has, from a very remote period of antiquity, held an important station among the occupations of the world.

* Read at the annual meeting of the American Public Health Association, Philadelphia, October 27, 1897.

He was, in a certain sense, the progenitor of the surgeon and the dentist of the present day and in ancient times was invested with professional rights and privileges by government sanction which might well excite the envy of his offsprings. To him was given the exclusive right to practise phlebotomy, which was until a somewhat recent date regarded as the most effective therapeutic agent known for the alleviation and cure of most of the diseases to which the human race is heir. Then, as now, the barber shop was a "focus of news" and "the favorite resort of idle persons," and the professional barber and hair dresser enjoyed the worldwide reputation for gossip and garrulity which is so familiar to us all.

By act of incorporation they were made "professors of the healing art" in England in 1461 during the reign of Edward IV., and so continued during the reign of George II. (A. D. 1726-1760), when the barber and surgeon were formally divorced.

We have some reason to believe that even in the remote periods mentioned, attention was given to the subject of sanitation in the selection and arrangement of the utensils made use of in their professional employment. Cleanliness was invariably provided for, a fact which is instanced by the symbol of the brass basin which has, for all time, been suspended from the striped pole which still constitutes the sign of the barber in many countries. This brass basin was always made with a crescent-shaped space cut into the side to receive a man's throat and thus prevent the soiling of clothes with the lather and other substances which were applied in the operation of shaving the beard. Again, it is worth noting that even in ancient Greece and Rome, barbers and *bathers* were associated in their labors and rivaled the physicians of that period in the practice of their art. Later on, in France, the "Society of Barbers and Bathers" was accorded the privilege of practising all sorts of surgery in spite of the protests of the regular surgeons. Barbering and bathing are to some extent associated in our time, but not to the extent comprehended by the subject of these remarks, it is a matter of regret to state.

If, as we presume, the sanitation of cleanliness was observed by the barber surgeons of medieval France, the system must have degenerated to the present date, for, as was above mentioned, the first attempt of modern times to regulate sanitarily the operations of the barber shop was recently made in the city of Paris. As a police regulation and by direction of the sanitary authorities, an order has been promulgated requiring that specific rules of asepsis and disin-

fection shall be observed in all shops for the protection of the public. These directions include the use of only metal combs, in order that they can be easily sterilised, and that, as far as possible, all instruments shall be of metal; that the razors, clippers, scissors, combs, and the like, shall be subjected to a heat of 100° centigrade before and after use; that the shaving brushes must be washed before and after use in boiling water and that the hands of the barbers shall be thoroughly cleansed before passing from one customer to another. They are required to use sterilised towels and pulverisers in place of the common powder puffs, and the hair that is removed is to be disinfected and promptly taken from the room. Chemical solutions are also prescribed for obvious purposes.

The writer is not informed as to the method by which it will be made certain that these regulations will be faithfully observed, but doubtless a system of inspection will be inaugurated under police surveillance which will insure detection in case of nonobservance and the proper punishment of all offenders.

When advised of the promulgation of this order by the Paris health department, the thought at once occurred that the same might well be universally adopted as an important reform in the matter of local sanitary administration. As individuals we are constantly reminded of the grave personal dangers which threaten the patron of the average barber shop and many of us have long since adopted measures of prevention for self-protection. The writer's experience does not differ from that of many others who have professional knowledge of the communicability of pediculi and disease. The magnificent (?) beard which he now presents to your view is the result of an occasion when a characteristic danger was imminent. One evening several years ago a sheepish-looking individual shuffled his way into my office waiting-room and requested a prescription. He was observed to be suffering from syphilis and presented a most unattractive appearance; his face was literally covered with eruptions and his mouth and lips were ulcerous in a high degree with the form of manifestation known as "mucous patches." His hair was fast falling and in short he was a perfect focus of infection. His case was disposed of and he was gladly dismissed.

Having to take an early morning train I shortly afterwards proceeded to the barber shop to prepare for my toilet. My barber's chair was occupied and I sat down to await my turn. As the occupant was about to arise I was startled to observe the very patient for whom I had prescribed an hour previous!

It is needless to say that I took my departure, although I was obliged to exercise some *finesse* in order to avoid exposing the professional secret that had been confided to me. Neither did I dare for the same reason to offer any suggestion for public protection. Instances with this latter feature, in this and other relations, are constantly occurring to physicians as all who listen will appreciate.

Then and there I resolved that my face should never again be shaved by a barber and the result is apparent. I also adopted a plan for my occasional visits to the barber shop for the trimming of hair and beard. Carrying always a packet containing shears, comb, brushes and clippers, I insist that everything be removed from the chair, clean towels be substituted and that the barber thoroughly wash his hands before proceeding; and for all this I tender him (beforehand if a stranger) a fee so large that he cannot complain of what ordinarily seems to him a hardship. The only inconvenience I experience is, that among the tonsorial fraternity of my vicinity I am compelled to bear the somewhat unsavory name of the "champion crank of the town."

This item of personal observation is introduced to direct attention to only one phase of the many dangerous situations which will readily occur to the sanitary mind, and it seems entirely unnecessary in this presence to attempt to elaborate this simple note of warning and protest by offering illustrative examples.

Instances almost without number might be collected and presented to prove the transmission of various diseases by the methods commonly practised in tonsorial operation. Pages might be written from the scientific standpoint to show the prevalent violation of well-established hygienic principles and the possibilities of parasitic and bacteriologic communication. Such an effort would be a work of supererogation indeed. The assumption is quite warrantable that there is scarcely a step in the processes usually employed by the barber which does not carry an element of danger when the most careful precautions are not observed. There is probably not a physician of considerable experience who could not cite examples which have occurred in his observation to support the argument presented, but it may well be doubted whether even with such precautions as might, and sometimes are, made use of in the ordinary way, such articles as combs, brushes and sponges would still be unclean and capable of conveying vitalised elementary substances from one person to another. Take the matter of sponges, for example. No surgeon thinks of using one a second time, unless it is passed through a process of disinfection

requiring an amount of time and labor which more than covers the cost of a new one, and yet in many, if not most, barber shops the same sponge is repeatedly used from face to face, with nothing more than a simple squeezing between each sitter, which cannot remove the infected blood or pus from the often broken or eruptive cuticle.

In the opinion of the writer it is absolutely impossible, no matter how good may be the intention, to properly cleanse and sterilise any of the instruments employed without consuming an amount of time and material which would render such an effort impracticable. Hence it appears that nothing short of such compulsory regulations as have been adopted by the Paris authorities would be effective. Local administration of this character should be made to apply to every barber shop, whether rural or urban, and a system of inspection established to enforce the rules. There will be found in many localities some items which the Paris regulations do not seem to cover, such as the particularly dangerous use, from patron to patron, of the alum stick to staunch the flow of blood from the cut cuticle, the common use of the block of magnesia to complete the drying of the newly shaven skin, both of which articles sometimes do continuous service for weeks for the occupants of the same chair. Of course, these remarks do not apply to all shops, as many of them are kept as cleanly as is possible without scientific disinfection, and most of the better class of barbers would gladly join in the movement of reform if a proper opportunity were offered.

The legislature of the state of New York has had, for a year or two past, a proposition pending for the enactment of a law which would, in a great degree, serve to correct many of the evils referred to here. This bill emanates from a representative organisation of the barbers themselves and has the uniform support of all the better classes among them. They desire the law for self-protection and to elevate the general character of their business. By the provisions of the proposed regulation a board of examiners will be appointed, which will proceed to qualify the members of the trade by systematic examinations of such a nature as to demonstrate the fitness of each individual applying for a license and no one can practise except he is so qualified. It is understood that the knowledge of the scientific rules for disinfection and general sanitation will be an integral part of the requirements. This measure will be pushed during the coming session and the barbers' association will receive the support and active aid of the medical societies. Should it be enacted and health boards in general promulgate the rules of asepsis and disinfection

by which to enforce the provisions of the law, nothing more can be desired.

It is understood that in Germany the general regulations for the licensing by examinations of all occupations in great part solves the problem of sanitation in barber shops, as only those are licensed who are especially qualified from all points of view. Such a system should be made applicable in all states and countries. Horseshoers are thus qualified in the state of New York and why is it not just as important to regulate barbers in the same manner?

It is remarkable that since this information has come to us from abroad the medical journals and newspapers are teeming with commendatory comments and wonder is often expressed why this subject has been for so long officially unnoticed. Without doubt the people will be quickly educated to the necessity for action and the efforts of health boards will be supplemented and facilitated by favorable public sentiment.

Let us adopt for our motto in this respect the Spanish proverb, "*Dicho y hecho*" (no quicker said than done) and with the greatest promptitude practicable demand that an intelligent and unprejudiced inquiry be made into this fruitful source of disease transmission, to the end that the fundamental principles of sanitary science may be made to apply to it as well as it does to many less threatening situations.

If the surgeon and the dentist are morally and, in a negative sense, legally, under obligations to disinfect and sterilise in all cases their instruments before using them, why is it not just as reasonable to hold a barber equally responsible for neglect of such precautions? And why should it not be properly within the province of health boards to protect the public in this regard and quite within the jurisdiction of this association to add its powerful influence towards the promotion of the means for the accomplishment of this much-to-be-desired reform? We are constantly striving to regulate the disinfection of railroad sleeping cars, passing ordinances to subvert the dangers of the spitting nuisance, loudly demanding the substitution of the individual for the common communion cup and in divers other fields are endeavoring to compel the proverbially heedless public to have a care for their own welfare, but it may well be said that the hygienic regulations of the barber shop far exceeds in importance the most of these undertakings.

RÖNTGEN RAY AND ITS USEFULNESS.[1]

By FREDERICK PREISS, M. D., Buffalo, N. Y.,
Lecturer in electro-therapeutics.

TO THOROUGHLY familiarise yourself with the discovery of the Röntgen ray, I shall give you a summary of experiments which led up to this important event. Faraday invented the terms anode and cathode, which indicate the conductor terminals of a current of electricity. He also studied the effects of electrical discharges within tubes containing rarefied gases. Geissler improved these tubes and increased the degree of rarefication: he also experimented with many kinds of gases, noticing the beautiful effect of a number of them. It was also noted that these gases acted differently at the anodal and cathodal terminals within the tubes and that fluorescence was produced, which was the result of the cathode extremity. Following these experiments came the magnificent researches of Prof. Crookes, who, by his high vacuum tubes, demonstrated that electrified particles were projected in straight lines within the tubes from the cathode end, producing a fluorescence of the glass, which was caused by the bombardment of these electrified particles.

Next came Hertz, who showed that the cathode rays possessed penetrable power within the tube, and his student, Lenard, discovered that the cathode rays possessed the same qualities outside the tube to about the distance of three inches from the tube, and that the ray would pass through certain substances easier than through more dense objects; he also showed that these shadows caused by the ray not passing though opaque substances might be impressed on a sensitive plate and developed in the usual art of photography. But to Prof. Röntgen is given the credit of producing similar effects at enormously long distance from the tube, he also being the first to bring the ray into practical use by having shadow-photographs taken of the bones of the human organism. Prof. Röntgen claimed that the rays from which these results were obtained were not those of his predecessors and brought forth arguments to substantiate his claim, but arguments may be brought forward also in favor of the cathode ray being identical with the Röntgen ray, differing from it only in degree as regards severity or penetrable power. In my opinion the ray is cathodal and is developed in any of the Crookes or Geissler tubes by the passage of electricity through them, and the strength or penetrable power of the ray depends wholly upon two favorable conditions—namely, (1) a cer-

1. Read before the Buffalo Medical Union, February 23, 1898.

tain amount of electricity of high electromotive force; (2) the proper vacuum of the tube used. After many experiments I have come to the conclusion that the Hertz, Lenard and Röntgen ray are all one and the same, differing only in the degree of penetrable power, as above explained.

There has not been any discovery in any line of science which has caused as much worldwide interest as has Prof. William Conrad Röntgen's discovery of the properties of the penetrating light commonly called the *X*-ray. That name, in my opinion, is inappropriate for the following reasons—namely, in the first place the letter "*X*" is made use of in difficult problems to represent an unknown quantity and that is why it has been made use of in this instance. Although the ray is somewhat obscure, still we know that it is a light and is produced by the passage of electricity of very high voltage through a glass tube which has been previously exhausted to 1-1,000,000 part of air; consequently, when we know the origin, development and properties, I am not in favor of having it represented by the letter "*X*", but am more in favor of calling it after the discoverer of its usefulness and who was instrumental in introducing it to be used in a practical way. This personage is Prof. Röntgen.

My object in this paper will be to give a concise description of a Röntgen ray apparatus and describe its usefulness and, inasmuch as this subject is somewhat new and much experimentation is going on at the present time, I shall avoid, as far as possible, all unnecessary technical terms and theoretical discussions. Before advancing further on this subject I shall explain a few terms which I shall make use of.

(*a*) A "volt" is a practical unit of electro-motor force; (*b*) an "amperé" is a practical unit of rate of speed; (*c*) the "cathode" is a name given to the negative pole terminal; (*d*) the "anode" is a name given to the positive pole terminal; (*e*) a "Leyden jar" is composed of glass and has a tin-foil coating inside and outside of the jar to about one-half its height; a cork stopper is used through which a brass rod runs, having a brass chain attached to its inner end, which touches the tin-foil, and a brass ball or ring attached to its outer end; the inner tin-foil is called the internal armature and the outer tin-foil is called the external armature (*f*) high vacuum or high density is a name applied to the Crookes tube when it requires great electromotor force to drive the electricity through the tube in order to give the best penetrable light; (*g*) low vacuum or low density is a name applied to the Crookes tube when less electromotor force is required to drive the electricity through the tube and the con-

sequent penetrating power of the ray is much less than that of the high vacuum tube; (*b*) the fluoroscope is an instrument of great importance to the operator of the Röntgen ray. This instrument was devised by Prof. Edison and is composed of a pasteboard screen, covered with either fused tungestate of calcium or barium platinocyanide, set in a pyramidal box, having this screen as the bottom. This screen serves to the operator the same as the lens does to the telescope manipulator. Prof. Edison has experimented with many different salts, but up to the present writing the barium platinocyanide is by far the superior to any yet discovered for use in conjunction with the Röntgen ray. By the use of this instrument the operator is enabled to tell with what degree of perfection his tube is being excited and so aid him greatly in shadow-photography, or an examination may be made by the use of this instrument without the trouble or expense of having a shadow-photograph taken. It is a common practice of the operator of the Röntgen ray apparatus to test the penetrable power of his tube by looking through his hand and noticing the distinctness of the bony outline. I am much opposed to such a practice, as injurious effects may sooner or later develop if he uses the coil apparatus to a considerable extent. I should advise a metallic or other object to be placed in a book or box and to be looked at each time he operates, and soon his eye will become accustomed as to the clearness of the object when the tube is working to perfection. This method, as I advise, is equally instructive and not at all injurious to the manipulator.

In the development of the Röntgen ray there are three main apparatuses used to excite the Crookes tube—namely, (1) the static machine; (2) the induction coil; (3) the Tesla transformer.

In order to do Röntgen ray work from a static machine the size of the machine must first be taken into consideration. As a rule, an eight plate or more does the best work, although the ray can be obtained from as small a machine as a four plate, but not with any satisfactory results. There are three methods employed to excite the tube by a static machine: (*a*) the convective, (*b*) the interrupter spark gap, (*c*) the Leyden jar oscillating current. The only difference in all these methods is in the connection. A description of each is here given. (1) In the convective method, simply connect the tubes to the prime conductors and be sure that you have connected the anode of the static to the anode of the Crookes tube, and in commencing operation by this method have the spark-gap two inches between the sliding terminals and gradually

pull them apart beyond sparking space while the machine is in motion. It is customary to place large Leyden jars beneath the pole pieces of the static machine in the hope that better results may be obtained, the jars acting as condensers and having a tendency to reinforce the current; but I have not noticed any material difference in such arrangements. (2) The Leyden jar oscillating current is attached by connecting the tube terminals with Leyden jars having not more than twelve square inches to the external or internal armatures; otherwise, if larger jars are used, the condensation is so great and the consequent current reinforced to such an extent that injury may be done to the tubes. In commencing operation by this method have the sliding poles close together and gradually pull them apart beyond sparking capacity as the machine is being worked. In having the Leyden jars in a circuit, remember that by induction the current is changed—namely, the prime conductor giving positive electricity and entering the internal armature as such, is negative when it leaves the external armature; therefore, for example, an anodal prime conductor of the static machine is attached to the cathodal end of the Crookes tube, providing the Leyden jar is in the circuit between the static machine and the tube. (3) The interrupter spark-gap is connected in the following manner: having first noted the anodal and cathodal terminals and having placed the interrupters on the handles of the sliding rods, which have been pulled wide apart, connect the anodal interrupter to the anodal terminal of the tube and the cathodal interrupter to the cathodal terminal of the tube. In commencing operation with a machine connected in this manner have the interruptions about one-eighth of an inch in space and gradually increase this space to about one inch at the positive and to one-half inch at the negative pole. Of course, this space of spark-gap will depend greatly upon the size and density of the tube. The Leyden jars may be in their proper position with the external rod extending high enough to be in contact with the post of the sliding terminal. In this position the jars are supposed to act as condensers and so increase the electromotor force of the current. This method of connecting I claim to be superior to the other two, for the following reasons: (1) There is not as much waste of current and consequently a greater amount passes through the tube; (2) the interrupters give greater bombardment to the ray within the tube and thereby greater penetration is produced.

The induction coil is the most convenient, especially if the apparatus be taken to the bedside or clinic room. The first object which confronts the purchaser, however, is how large a coil should be

bought? For all ordinary purposes a six to ten inch is sufficient; it also must be decided whether a direct or alternating current is to be used for the primary circuit or battery. I should recommend the direct current in the form of a movable battery. A necessary accessory to the coil is a vibrator or rotary interrupter; both work satisfactory, but a rotary interrupter run by a small motor is to be preferred, as more even interruptions are thereby obtained, which is conducive to better Röntgen ray production. A rheostat should be used to control the current supplied to the primary of the induction coil, as, if too strong a current be passed to the coil, it is very liable to be burnt out and consequently ruined. If the coil be immersed in oil it is not so easily short-circuited and will give the purchaser more service.

Tesla Transformers. Mr. Tesla has devised a coil which develops statical electricity and may be attached to a direct or alternating current and consequently may be connected to any of our electric light currents. Mr. Tesla claims that with an ordinary incandescent lamp his coil may be used in place of the ordinary static machine in the treatment of various diseases. Unfortunately the coil is not manufactured at present, but Mr. Tesla informs me, however, it will be in the course of a few months. Such an apparatus would be very useful, as it could be carried very easily to the bedside or the clinic room, where electricity or a small battery is at our command, without the slightest inconvenience, as the whole apparatus would not weigh over twenty pounds.

Many names have been given to the pictures taken in conjunction with the Röntgen ray. The following is a partial list: Cathode-photography, shadowgraphy, radiography, cathography, photography, electrography, fluorography, skiagraphy and röntography. There are two methods whereby this picture is taken: (1) by putting the object which is to be shadow-photographed between the sensitive plate and the Crookes tube; (2) by having a fluoroscopic screen and putting the object between this screen and the Crookes tube, and then with a camera take the picture of the image or shadow which appears on the screen.

You will observe that in either case we do not get a photograph of the object itself, but a photograph of the shadow of the object is produced; therefore, I have designated the word shadow-photography, which is self-explaining and is an appropriate word to use in conjunction with this part of the Röntgen ray work. In giving a description of shadow-photography the process is identical, whether a small or

large apparatus be used, or whether the shadow-photograph is to be that of a bone or that of a foreign body. Now, supposing the experimenter is ready to proceed. He takes the plate-holder containing the sensitive plate, the film side of which is turned upward, and fixes the object between the tube and the sensitive plate; everything being in readiness the apparatus is made to work. The length of time required for the exposure depends upon the following conditions: (1) the penetrating power of the rays; (2) the amount of tissue or substance which the ray will be required to penetrate.

There are now on the market plates wrapped in black paper and a plate-holder is not required. These plates will keep from four to six months without any deterioration as regards their sensitiveness. The experimenter must always remember that the Röntgen ray will destroy the sensitive plates; consequently these plates must be kept in an iron box or in an adjoining room having a partition made of other than carbonous material. Furthermore, the object to be shadow-photographed must be kept perfectly quiet, otherwise a fogging of the picture will result. You are all familiar with what a photographer will say when you have a photograph taken—namely, keep quiet and do not move a muscle; so in a shadow-photography, the object must be kept perfectly quiet. If the object be fastened to the sensitive plate it does not matter so much if both move slightly, but one must not move differently than the other. If you wish, for instance, to take a shadow-photograph of the hand, fasten the hand firmly to the plate by three or four bands of adhesive plaster. To the beginner, questions arise, (1) how far should the plate be kept from the tube? That depends upon the apparatus you have and the power of the ray, but, as a rule, very good results are obtained at about two to six inches from the tube. At this distance the picture will be the best as regards accuracy and fine definition. (2) How long must the sensitive plate be exposed? That depends upon two conditions: (*a*) The density of the tube, whether high or low: if the density be low, much time is required and at its best the definition is poor and inaccurate; but if the density be high, a much shorter time is requisite to obtain a perfect impression, a few seconds or even an instant of exposure to a perfect flash is worth more than minutes of the working of the ordinary tubes of low vacuum. (*b*) The object the ray has to penetrate, as, for example, under like conditions it will take double the time for the elbow than for the hand. There are a few suggestions I shall endeavor to make here in regard to the manipulation of the tube. To the experimenter it is of the utmost

importance to have the tube working perfectly before the sensitive plate is exposed, and herein the fluoroscope is made use of, after you have turned on the apparatus; have a certain object to look through and see whether the tube is working at its best. If you accustom yourself to look at the same object each time you will soon familiarise yourself as to how plain the object should appear when the tube is at its best, whereas if you use a different object each time you will have lost that advantage.

A word about the Crookes tube. This tube is exhausted to 1-1,000,000 part of air, having at each end a platinum wire fused in the glass and ending externally in a loop to make attachments to the exciting apparatus. Internally these wires end differently; the one is attached to a dish, usually made of aluminum, which function is to concentrate the rays and is called the cathodal extremity of the tube. It is always attached to the negative pole of the exciting apparatus, the other being attached to a reflector and is usually made of the same material; its function is to reflect the rays and is called the anodal extremity, and is always attached to the positive pole of the exciting apparatus. If these attachments be reversed, little or no penetrating ray will be detected outside the tube. If the vacuum of the tube be too high, heat the cathodal extremity slightly over a spirit lamp, taking care not to heat it too much at one point, as you are liable to break the tube by so doing. If the vacuum be too low, use the tube a while and the vacuum will gradually get better and the ray more penetrable. After the tube has been in use considerable and is not working perfect, reverse the connections a few minutes and the tube will again probably work to perfection; an impaired tube is also benefited by rest; but after a time the tube cannot be benefited by this means of repairing and will have to be sent to the manufacturers for reëxhaustion. Many tubes are on the market and it depends upon what kind of exciting apparatus it is to be used, as regards which kinds of tubes are best suited for that particular outfit. In connecting the tube with the exciting apparatus I should recommend the connecting link to be made of fusible lead wire, as a more perfect connection can be made and consequently less injury done to the tube through manipulation while making the necessary attachments. Tubes are manufactured which contain a salt in an extension at one end of the tube. This salt can be heated from outside the extension and lower the vacuum if it be too high. This tube is commonly called a focusing tube.

Great has been the interest taken by all the educated human race

in the achievements of the Röntgen ray, and the class that has been most interested is that of the medical profession, who are ever eager to grasp at new remedies and appliances that may assist them in their efforts to relieve diseased, suffering humanity. Among the foremost revelations of the Röntgen ray are those applied to normal anatomy and the day is not far distant when a first-class Röntgen ray apparatus will, out of necessity, be among the paraphernalia of the dissecting laboratory of every foremost medical college and hospital of the universe. It might be argued that the student can study as well from an artificially arranged skeleton, but such is not the case, as no human hand can arrange the osseous structures to the same perfection as nature. By the Röntgen ray shadow-photograph or by the use of the fluoroscope the precise relations of the bones to each other may be determined when the body is in the erect position or in any of the various attitudes. Development may be studied with great advantage, as developing bone may be easily distinguished from that which has already developed; likewise, the comparative anatomist is furnished an opportunity to study the osseous structures of the lower animals.

In the dissecting room the anatomical relations of the blood-vessels may be accurately determined by injecting into the vessels of the cadaver a metallic or nonpenetrable substance, which will show by opaqueness the precise course and distribution of the arterial circulation; the feasibility of this method may also be applied to the various cavities and organs of the dead body. In the living subjects the dimensions of the stomach may be determined by having the patient swallow ferruginous pills, or better still, a metallic ball attached to a string or flexible handle, and a shadow-photograph taken and the fluoroscope used while the patient is in certain positions. Irregularities and congenital deformities of the osseous structures may easily be determined; also the heart, liver and the kidneys may be outlined. To the surgeon the Röntgen ray is as requisite as the mirror is to the laryngologist or the ophthalmoscope is to the oculist. In considering the diseases of the bony structures of the human organism we find the ray indispensable in various pathological conditions, most of which I shall endeavor to bring before you. How often are we consulted when, owing to the extreme tenderness and extensive swelling, thereby causing inability to properly manipulate the disabled member, we are unable to accurately decide whether the case at hand is one of fracture, dislocation, a severe sprain with much laceration of the soft tissue, or perhaps all three; but now with the use of the Röntgen ray

we may very easily determine the exact nature of the existing disability and treat our patient with confidence and not with the fear of a possible malpractice suit. If in case of fracture you manipulate the broken bones and apparently get them in proper position, but are still in doubt as to whether the ends of the bones are in perfect apposition, all that is requisite is to place your subject before the ray and with the use of the fluoroscope you will be able to satisfy yourself whether or not they are now in their natural position. If the splints be carbonous, you may at intervals look through them and determine whether the bones are kept immovable and that healing is going on properly.

We find the ray also very useful in determining tubercular and cancerous disease of the bone, caries and necrosis, exostosis, floating cartilage of osseous formation and hypertrophy of bone; in fact, any disease whatever which shows increase or loss of bony substance. Many times we are consulted for troublesome pains referable to the bony structures. So localised is the pain that the patient is strongly under the impression that the bone is affected. By the use of the ray you will be able to convince your patient that such is not the case, but that the symptoms complained of are those caused by a probable localised neuritis and treat the patient accordingly. And so in a great many instances where the patient imagines that something is wrong with the osseous structure, you have only to use the ray, which will aid in the diagnosis and also gain the confidence of the patient and so aid materially in your endeavor to relieve the existing troublesome condition.

It is also very important to diagnosticate whether anchylosis, caused by a fracture or disease, is due to fibrous or bony union, inasmuch as the former may be remedied with good success and the latter not. The ray, in passing through an anchylosed joint, due to fibrous union, will show a light space between the ends of the bones; if due to bony union this space will appear opaque. Consequently the surgeon is in a position to enlighten his patient on the probable result if operative procedure be performed in either case.

In dentistry the ray is occasionally made use of in detecting whether or not a fang of a tooth remains in the socket, even if it be covered with soft tissue. The surrounding bone is more penetrable than are the teeth, thereby distinguishing the alveoli from the teeth or fangs. The lost end of a broken drill may be located if the dentist unfortunately breaks his instrument while operating upon his patient; also the central cavity of a tooth may be outlined so that

diseased conditions within the tooth may be detected. The growth and development of the teeth may be studied before and after they begin to protrude above the gums, thereby greatly aiding in the diagnosis of certain obscure cases of convulsions occurring during infantile teething.

One of the first applications of the discovery of Prof. Röntgen was the detection of foreign objects in the human body. Many occasions we meet with cases where the patients have been injured by fire-arms, whether intentionally or otherwise, and no one knows better than the surgeon how difficult it is sometimes to locate the bullet, but with the use of the Röntgen ray the exact position may be manifested, and once the object being located there are three methods by which to proceed for its removal:

1. The surgeon may take a glance through the fluoroscope to see where the foreign body is located and mark the spot, then giving the fluoroscope to his assistant. He takes his knife or forceps, as the case may require, and operates; if necessary he may be directed by his assistant, who has the management of the fluoroscope and is watching the operation through it.

2. A shadow-photograph may be taken whereby the exact location of the foreign body is determined and the operator, having the picture before him, can now very easily extract the object.

3. By the use of the fluorometer, which is by far the best method of exactly locating any foreign object. Not only does this apply to missiles sent by fire-arms, but to all substances which are nonpenetrable to the ray, such as needles, glass, pieces of steel, stone and the like. Then, again, we find important diagnosis made by the rays in abdominal concretions, such as stone in the kidney, bladder and liver. Also calcareous deposits may be detected in various parts of the body, such as in gouty and rheumatic affections.

Suppose you are consulted by a patient who has had articular rheumatism for many years, you will be unable in the majority of cases to say whether the swelling around the joint is all external to the periosteum, but by the use of the ray you may very easily determine enlargement of the osseous structure and consequently be able to give a more satisfactory diagnosis and prognosis of the case at hand. Fibroid growths of large dimensions, whether simple or malignant, may be outlined. Pregnancy may be diagnosticated as soon as the fetal osseous structures become slightly nonpenetrable to the ray. Prior to four months' gestation it is almost useless to attempt diagnosis by the above means.

To the practising physician the ray is not of such great importance as it is to the surgeon, but it may be made use of by him to determine consolidation of the lung, enlargement of the liver, enlargement of the kidney, enlargement of the uterus, displacement and enlargement of the heart, and is useful in the diagnosis of disease by exclusion. In almost all other diseases the practising physician will find the Röntgen ray of little service to him.

In the foregoing pages I have endeavored, to the best of my ability, to lay before you, in a concise way, the pathological and anatomical conditions wherein the use of the Röntgen ray is of great importance. Of course, I could cite many instances where I have found the ray of incalculable service. An example is here given:

January 8th a brother physician brought a patient of his to me for a Röntgen ray examination, with the following history: Pain more or less for six years since falling off a platform; at the time of the accident he alighted on both feet. At that time he was confined to the house for four days, after which he was out and about by the aid of a cane. Upon making a comparative shadow-photograph of both knees the bone of the injured leg, which was the lower end of the femur, was found to be half an inch wider in lateral diameter than the other; consequently, at the time of the accident the lower end of the femur must have been slightly cracked and was never properly put together. He was informed at this examination that nothing could be done and was much disappointed, but was pleased to be enlightened as to the exact nature of the existing difficulty. Previous to this he had consulted many physicians without any relief or satisfaction. Now, under the circumstances it would have been impossible to have diagnosticated this condition by any other advisable method except the one I have described.

Another very important application of the Röntgen ray will be in connection with testimony in lawsuits. Up to this date only two cases are on record where the presiding judge allowed the above used as such and in these cases it was used only as corroborative testimony. In all other cases the court did not allow such testimony as might be given by shadow-photography, but it will only be a matter of time when such evidence will be permissible. The main reason why shadow-photograph testimony is not at the present date always permitted is because most of the cases in the court at the present time are the result of injuries sustained before the ray was discovered and consequently the defendant did not have the advantage of the use of this recent discovery.

I may say that the field of experimentation of Röntgen ray work is large. There is ample room to make use of the ray in other directions than it has been used up to the present time. It is an interesting and notable fact that a diamond can easily be distinguished from a paste or glass, as the latter will appear opaque while the former will

not. It may also be used to detect flaws in metals or how much metal there is in certain ores. Who knows but that in a short time, by chemical or mechanical devices used in conjunction with the Röntgen ray, we will be able to differentiate between the cyst, hematoma or a collection of pus and the like.

A word here about the beneficial and curative effect of the Röntgen ray. Allow me to say that, in my opinion, it has not any such property whatever. Much experimentation has been carried on, but all without the slightest encouraging result, but, on the other hand, injurious effects may be procured by a constant or repeated exposure of a coil apparatus.

Cases have been cited of the falling out of the hair, erythematous sloughing, inflammation of the eyelids and skin generally, and falling off of the nails, but this injury, in my opinion, is not produced by the ray itself, but is produced by the subject being placed in too close proximity to the electric current, which current is of high voltage and consequently the patient is subjected to some extent to the electro-galvanic burning, which manifests itself in and around the tube and its conductors. I have yet to witness a single case where the slightest injurious effects have been produced by the proper manipulation of the Röntgen ray apparatus; but if operated by an imprudent or unskilful hand, occasionally considerable injury may be manifested. Pray, what is not injurious if carried to excess?

The ray itself appears to have very little, if any, action upon animal or vegetable organisms. Any action that does manifest itself is due to electric diffusion, which is the result of leakage from the tube and its conductors while the apparatus is being operated.

160 Franklin Street.

REPORT OF A CASE OF MULTIPLE IDIOPATHIC PIGMENTED SARCOMA.[1]

WITH PRESENTATION OF PATIENT.

By GROVER WILLIAM WENDE, M. D., Buffalo, N. Y.

THIS peculiar and uncommon affection was first recognised by Kaposi in the year 1879 as multiple idiopathic pigmented sarcoma of the skin. His personal knowledge covers sixteen cases, all occurring in men. Since his discovery, like conditions have been

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

described by various writers. Kaposi declared that the first manifestations of the disease invariably appear on both hands and feet: then gradually progress upward, by distinct growths upon the arms and legs: and that, finally, within the course of two or three years, the trunk and face become involved. The initial growths vary in size from that of a pea to that of a large bean, and are usually colored a reddish-brown, changing in time to a bluish-red. They possess quite a firm consistence. Some are isolated and irregularly situated, some united in groups, while others coalesce into diffuse infiltrations, varying greatly in size and contour. The parts affected present a puffed appearance and the skin is often so rigid as to interfere with locomotion and manipulation. After some months the original lesions may partially or entirely disappear, leaving a pigmentation. In the process of time, other portions of the body may become affected, particularly the nose, mucous membranes, eyelids, cheeks, lips and indeed any other part.

This type of sarcoma does not necessarily cause glandular enlargement. After existing for some time, it may involve a determination toward a bloody diarrhea, hemoptysis and marasmus, with death as the consummation.

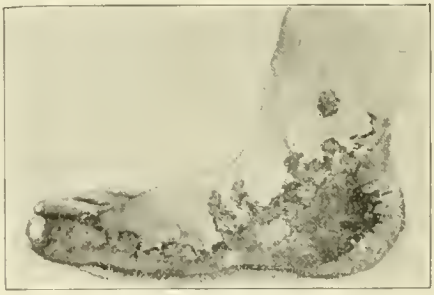
Professor De Amicis, at the international congress of medicine, held in Moscow, September, 1897, declared that there are only fifty cases of this disease on record. He also thought it would be more correct to consider it as granuloma instead of sarcomata.

Post mortem examinations have revealed the coëxistence of nodules in almost every internal organ and, with few exceptions, these new pathological formations were found to be made up of round-cell infiltrations, while the characteristic spindle-cell sarcoma was infrequent. The diffuse infiltration, peculiar hardness and the bluish-red discoloration can be readily explained by capillary hemorrhages. The prognosis is almost without exception unfavorable.

With this brief description, I shall now present to you a case of this rare and interesting malady to which my attention has been recently called. The case is not so unique in its manifestations as some, owing to the beneficial influences of treatment already received. The patient was referred to me by Dr. Bernard Cohen, who furnished the following history of the case:

Mr. —— is forty-five years of age, a native of New York City, by occupation a tailor, of spare and sinewy build and apparently well nourished. He is swarthy of countenance, with dark hair and eyes. His father died of influenza, his mother is still living at the age of seventy-five and he has three brothers and two sisters all in excellent health. As far as known, no member of the family, near or remote,

was ever affected with any form of skin disease. He claims that he has never indulged in vices or excesses. His style of living has always been modest and his habits have been regular, including a close application to work. There is no evidence of syphilis. He is married and has five healthy children. His only serious ailment is the one from which he now suffers. It was in May, 1896, when he sought relief by consulting Dr. Cohen for pain in the right ankle and a feeling of distress which emanated from the stomach. The doctor attributed his condition to certain spasms due to auto-intoxication. The direct symptoms were coated tongue, large epigastrium, pain and irregular movements of the bowels. Occasionally there was some prostration, due to enervation. The urine was repeatedly examined and the color, odor, reaction and specific gravity were generally found normal; however, the sediment, consisting largely of the earthy phosphates, was increased. Neither sugar nor albumin was detected; indican frequently occurred in an unusual amount. At the first visit of the patient, Dr. Cohen observed that a section of the skin over the inner surface of the right foot presented a number of peculiar, hard, red and painful nodules which had a tendency to group. The pain has since continued. A fortnight later the doctor discovered several nodules situated in the floor of the nose which were oval and quite firm to the touch. As many as eight of these have been removed during the past year. Two months after the appearance of the original lesions, the disease manifested itself upon the index finger of the right hand in the form of circumscribed spots under the epidermis, which gradually coalesced and spread over the greater portion of the hand.



WENDE: Multiple idiopathic pigmented sarcoma.

The initial spot at one time affected the deeper structures of the skin and underlying tissue to such an extent that it resembled elephantiasis in appearance, which, upon absorption, undoubtedly due to the treatment received, gradually grew less and, at last, partially disappeared, leaving the patient lame and flat-footed. The remedy employed was arsenic, in the form of Donavan's solution.

I first saw the patient on September 2d of the present year, at which time his condition was somewhat changed. He had lost sixteen pounds in weight, his complexion was more sallow, the liver and spleen were slightly enlarged and there was constant pain in the epigastric region. The lesions were limited to the hands and feet, except a few small nodes which appeared in the nasal cavity. The sympathetic glands were not enlarged.

The manifestations found upon the right hand consisted of a dense infiltration exhibiting a dark violaceous hue, which seemed to be composed of numerous small compacted nodules located upon the dorsum and covering an area of about seven centimeters. The backs of the fingers were equally involved. Upon the palmar surface the space affected was not quite so large, measuring five and one-half centimeters. The first, second and third fingers were implicated in the distribution.

Upon the left hand, covering the upper and outer portion of the thenar eminence, existed an irregular patch five centimeters in diameter. A similar patch occupied the lower half of the little finger, which was joined to one triangular in shape and measuring six centimeters in its widest part. Upon the palmar surface and upon the anterior surface of the left forearm were four patches varying from one to one and one-half centimeters in diameter. Upon the right forearm were a few small lesions, and upon the anterior surface of the corresponding arm, three inches above the elbow-joint, was a pigmented spot having a diameter of one to one and one-half centimeters, revealing more or less infiltration.

Over the inner malleolus of the left foot a large equilateral patch of triangular shape, its sides measuring in length about twelve centimeters and its base running parallel to the plantar surface, pervaded the exterior, which was pigmented on the dorsal side, the diameter measuring three and one-half to four centimeters. A patch having an area of about two centimeters was located on the skin over the posterior extremity of the great toe, which patch contained five or six small spots of pigmentation in the border of the tarsal side. Below the external malleolus another triangular patch occupied the surface which extended backward upon the heel. Its lateral borders were seven centimeters in length and its base measured nine centimeters. Pigmentation in the spot was discernible. Two small lesions could also be seen immediately above the right knee.

The left foot, on its inner surface, was almost entirely covered with a band-like patch having a length of fourteen centimeters and whose width varied from one to four centimeters, which spread anteriorly over the toes and backward as far as the tarso-metatarsal articulations. Anteriorly over the dorsum and ankle-joint and extending upon the leg were nine distinct and separate nodes varying in size from one and one-half to two centimeters. Below the inner malleolus was recognised an area measuring from four to six centimeters.

The diagnosis of sarcoma is largely based upon the microscopical appearance of excised nodules of recent development, taken from different localities.

It was found in the present instance that the epidermal layer was apparently normal, nor did the papillæ exhibit any perceptible change in their structure, while the blood-vessels between the epidermis and subcutaneous tissue were slightly enlarged, engorged with blood and thin. Several nests of spindle-cells were easily recognised under the microscope, some of which revealed pigmented granules. The tissue between these nests was largely composed of embryonic cells. The hair follicles were unchanged.

An examination of the patient's blood, made on October 10, 1897, by Dr. Fred C. Busch, gave the following results: Hemoglobin by Fleischel, 75 per cent.; specific gravity, 1.065; number of erythrocytes per cubic millimeter, 3,900,000; number of leucocytes per cubic millimeter, 4,697; polyneuclear neuthropiles, 75.75 per cent.; large mononuclear, 12.12 per cent.; lymphocytes, 12.13 per cent.; eosinopheles, 0.

The treatment of this disease chiefly consists in the internal administration of arsenic. In the case under consideration the arsenic used was in the form of Fowler's solution combined with tincture of iron, dilute hydrochloric acid and extract of malt administered in the hope that the strength of the patient would thereby be increased and his anema more readily relieved. Since the twentieth of September the arsenic has been administered subcutaneously, according to the plan advised by Köbner. At the present time the patient is receiving daily seven drops of Fowler's solution in twelve drops of distilled water hypodermically.

Kaposi believes that the prospect of much benefit from arsenic, or any other means, is very remote. On the other hand, Kobner strongly recommends the hypodermic administration of arsenic.

Several cures due to the method advised by Kobner have been reported by other practitioners. For myself I have decided strictly to follow Kobner's plan, which is described in the *Berl. Klin. Wochen.*, No. 2, 1883, and thus far my experience shows that good results follow the employment of arsenic in the cases mentioned. It certainly diminishes tissue-changes.

471 DELAWARE AVENUE.

SOME FACTORS IN THE PRODUCTION OF EPILEPSY.

By WILLIAM HOUSE, M. D., Buffalo, N. Y.,
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FOR centuries the falling sickness has been a subject to which physicians have devoted unremitting study and attention. The unfortunate character of the symptoms, the tendency in most cases to progressive increase in the frequency of the seizures, the associated impairment of the intellect, the unsatisfactory results from treatment and the gravity of the prognosis, combine to make it a most disagreeable affliction and a stumbling block in the path of progress and advance.

The only rational hope for improvement in our knowledge of this disease and consequently in our treatment, must be based upon a more complete mastery of the etiology, which can only be obtained by thorough study of the pathological changes that produce, accompany or result from epilepsy. Unfortunately our knowledge of the morbid anatomy of epilepsy is limited.

We are indebted in no small degree to Starr and Van Giesen, of New York, for elaborate descriptions of the changes found in the brains

of a number of patients suffering from Jacksonian epilepsy. The cases were selected ones and were such as presented symptoms indicating local cerebral lesion, manifesting itself in the production of seizures involving only localised areas; all the cases recorded gave a history of trauma. With the aid of a surgeon the patients were trephined over the areas supposed to be involved and the brain searched for abnormalities, not only on the surface, but beneath it, by means of exploratory needles for evidences of increased density. In those cases in which distinct changes were found, the involved tissue was exsected and submitted to careful microscopical examination. Briefly, the results obtained were such as might naturally be expected to follow injury to cerebral tissue and consisted essentially in degenerative processes in the cells of the cortex, surrounding areas of more or less infiltrated scar tissue. The operations were followed in most cases by improvement or recovery, showing the causative relation of the morbid parts to the production of the epileptic seizure.

While the results of these and other observations on the morbid anatomy and treatment of Jacksonian epilepsy are of great interest and importance, they are unfortunately applicable to only a small proportion of the entire list of cases. Jacksonian epileptics differ from the vast majority of the sufferers from epilepsy, in that the manifestations are more or less localised, whereas in typical epilepsy the seizures are general and of much greater severity. Observations on Jacksonian epilepsy unquestionably aid in studying the disease, no matter what its type, by furnishing an index or working basis and by properly directing the energies of the pathologists to whom we must look for aid in establishing a recognised etiology for the disease.

Causes of epilepsy, as given by the authors of text-books and monographs, vary greatly and include almost every imaginable disease-provoking element. Age, sex, heredity, alcoholism, syphilis (acquired or inherited) brain tumor, trauma, fright, digestive and renal disease, reflex disturbances, toxic factors, such as lead and uremic poisoning, these and numerous other causes are mentioned. Any of the above conditions may, no doubt, act in certain cases, either as predisposing or exciting, direct or contributing causes. The exact relation of some of them as trauma, tumor, syphilis and perhaps alcoholism, may easily be explained by the production of new growth, acting as a center of irritation, which under certain conditions produces the epileptic explosion. These pathological conditions are

present in only a small percentage of cases, however, and if alone responsible for the convulsion, should produce, not the irregular spasmodic seizures, separated by prolonged intervals of quiet, but a single long-continued convulsion, or a series of shorter constantly recurring convulsions, separated by short intervals of quiet, the result of exhaustion, and reappearing in greater or less severity, according to the strength of the victim, until death results; such a condition actually occurs in status epilepticus. Nor do such lesions, producing only local convulsions, account for the complete loss of consciousness which occurs in every case of true motor epilepsy, lasting in time from seconds to hours and which associated with a convulsion not followed by paralysis, constitutes the pathognomonic symptom of this disease.

What, then, is the element directly productive of the epileptic attack? Some other factor existing as a concomitant feature, inconstant, present only part of the time and which when present produces the undue irritability of the nerve cells, or itself acts as the irritant agent, the "last straw" which causes the convulsion. Moreover, to account for the periodic nature of the seizure this element must be present, no matter whether there is gross pathological lesion, such as scar or gumma, or whether the brain is entirely free from such lesion, and it must be an element capable of variability in the intensity of its power to cause cerebral irritation, coming and going with the convulsion.

Van Giesen, director of the state pathological laboratory, with the unlimited material obtainable from the state hospitals for the insane and Craig colony for epileptics, is investigating with the aid of a large, well-equipped laboratory and skilled assistants, to prove a special toxicity of the blood at the time of the convulsion. His theory is on par with the theory of toxemia as the cause of insanity, and is probably a correct one, so far as it goes. It is distinctly corroborated in a clinical way, as evidenced by the greater frequency of convulsions in epileptics during periods of gastro-intestinal disturbances, notably constipation, which doubtless produces a mild degree of intestinal toxemia. Other observers are working along similar lines, but have not yet proved their theories.

A careful study of an attack of major epilepsy will bring forth symptoms bearing close resemblance to the seizures of apoplexy, paresis and chronic alcoholism. A typical attack of grand mal is usually preceded by indefinite sensations in various parts of the body, or by uneasiness. The patient may or may not recognise these

sensations as auræ, although in the experience of the writer in an examination of a large number of cases at the Erie county hospital, at Buffalo, and the Manhattan state hospital, at New York, they were always present. The pulse prior to the attack is usually full and slow, the face flushed and congested. Excretory activity is diminished, the urine being scanty and high colored. The convulsion is ushered in with a cry and the patient falls unconscious with muscles set and rigid. The pulse remains full and of increased tension and is infrequent, often 50 or less per minute. For a moment the chest is fixed and rigid, the face congested or even cyanotic. The muscles now begin to twitch and the tetanic contraction gives place to spasms of a clonic nature. The eyes roll in their sockets, the respirations are slow and stertorous, the patient remains profoundly unconscious. By comparing the convulsion at this stage with the seizures of cerebral hemorrhage many points of resemblance are found. The loss of consciousness is duplicated by the syncope frequently observed in the early stages of a cerebral hemorrhage. The spasmodic muscular contractions are duplicated by the clonic spasms, occurring early in hemorrhage. In both conditions the respirations are at first slow and stertorous, pulse full and slow and pupillary reactions are also similar. It is true, that continuing, the cerebral hemorrhage results in a more or less complete paralysis of the muscles over which the involved centers preside. This has no analogus in epilepsy, because epilepsy stops before this point is reached. The stimulus which produces an epileptic seizure acts on the muscles as does a full medicinal dose of digitalis on the heart, *i. e.*, it causes increased activity while the stimulus of cerebral hemorrhage behaves as does a poisonous dose of digitalis on the heart and vasomotors, *i. e.*, paralysis results.

True epileptic seizures also bear marked resemblance to the convulsions occurring in alcoholics, in whom at post mortems we find edema of the brain, the so-called "wet brain" of alcoholics, a brain the cortex and membranes of which are distended—soft, edematous, dripping fluid on section, with ventricles dilated by fluid—a brain so enlarged that the cranial cavity seems too small to hold it. Equally similar to epilepsy are the convulsions seen in many paretics and which are spoken of as the epileptiform convulsions of general paresis. Without preceding knowledge of the case, it is often difficult to make a differential diagnosis between epilepsy and paresis in a patient seen for the first time during a convulsion. The writer has seen a paretic under close observation by men of wide experience in

insanity, for a period of three months, during which he had several seizures before a diagnosis could be made. In necropsies, performed in similar cases in the experience of the writer, the examinations have revealed, in addition to the existence of cortical destruction and atrophy, always present in paresis, unusually marked distention of the membranes and subpial distention by fluid.

In all three of these latter conditions, post mortem examinations reveal evidence of increase in the fluid contents of the cranial cavity —an increase which causes pressure and which must therefore bear causal relation to the convulsion. The similarity of these convulsions to the seizures of epilepsy naturally leads to the inference that the convulsions depend on causes of a somewhat similar nature. As apoplectic and paretic convulsions result from pressure on the cerebrum, so also do epileptic attacks result from pressure and a careful study of a series of epileptic attacks lead to the belief that they are the result of a diffuse cerebral pressure, with perhaps some point or points of greater intensity, producing greater reaction of certain muscles; such areas being accounted for by the presence of often recognised lesions, such as scar or tumor.

Epileptic convulsions frequently cease with the passage of a quantity of urine, often pale, at times dark and concentrated. Urinary activity now becomes increased, the skin is covered with perspiration, the pulse becomes more rapid and softer, the slow, stertorous respirations give place to normal breathing, the pupils again react to light, the convulsive movements cease, the congested face gradually assumes a healthy tint, and the patient either slowly regains consciousness or falls into a deep heavy sleep from which he can be roused with difficulty. Many symptoms which are part and parcel of the convulsion point to a cerebral pressure which is general, while the method of the return to the normal state indicates equally relief from pressure, at times with great rapidity, more often slowly, just as might be expected to follow the quick absorption of fluid.

The post mortem examinations of patients suffering from grand mal reveals little that is recognised as characteristic. The brain in many cases shows no indication of abnormality and without knowledge of the events preceding death a diagnosis would often be impossible from the necropsy. In five examinations which the writer has seen on patients dying of status epilepticus, two at the Erie county hospital, at Buffalo, and three at the Manhattan state hospital, New York City, the only feature invariably present was an increase in the quantity of cerebro-spinal fluid. A careful examination of the

records of over thirty necropsies performed at the latter institution, in which epilepsy was given either as a primary or contributing cause of death, shows that where the cerebro-spinal fluid has been mentioned at all an increase has nearly always been noted.

In four of the five cases mentioned no other change save apparent slight congestion was noted. In the fifth, seen at the Erie county hospital, in addition to the increased quantity of cerebro-spinal fluid, a band of fibrous tissue, apparently derived from the dura, was found dipping down beneath the end of a small convolution in the right occipital lobe, causing a very noticeable constriction.

The one feature always noted—that is doubtless the increased quantity of the cerebro-spinal fluid—is an important element in the production of epilepsy. Ever varying in amount, even in health, depending on the relative activity of general and lymphatic circulation, the cerebro-spinal fluid is sufficiently elastic and unstable in its movements to be readily affected by intrinsic and extrinsic factors. The ability of this fluid to cause convulsions is attested by Landois and Sterling, who state that "if it be suddenly withdrawn, convulsions or epilepsy may ensue, or, if it be rapidly increased in amount, coma may be produced." The American Text-book of Surgery says of spina bifida: "It may probably be reduced by gentle pressure or at least diminished in size, the diminution being attended with increased tension of the fontanelle and sometimes with stupor, convulsions or other nervous symptoms." Dr. Park, in his text-book, makes a similar statement. Pressure in spina bifida simply causes the fluid contents to force their way upward into the cranial cavity, thus increasing the quantity of fluid surrounding the brain, convulsions or coma resulting according to the degree of such pressure. The increase of this fluid in epilepsy is analogous to the edema in the alcoholic wet brain, to the increased quantity of fluid in paresis (which may be simply increased cerebro-spinal fluid or may result from the destruction of the cortical convolutions), and even to the more localised increase in quantity of fluid, occurring as a result of hemorrhage or abscess formation. All cause pressure and all tend to the production of symptoms bearing striking resemblance and differing principally in degree and extent.

What the exact condition may be that permits of such marked fluctuation as occurs in the quantity of this fluid in epilepsy is uncertain. Possibly a toxic element is responsible; more likely a defect in the activity of the lymphatic or excretory functions. It is certain that the thorough evacuation of the intestinal tract in epileptics,

especially if hydragogue cathartics are used, often prevents a convulsion, and care in this respect materially diminishes the frequency of the seizures. Convulsions in habitual epileptics are augmented in frequency and in severity by failure to attend to this detail. Moreover, the naturally sluggish organs of the average epileptic predisposes to excretory inactivity. Whether the unloading of the bowels exerts a purely derivative effect, or whether it prevents absorption by the removal of toxic elements, or both, is open to question.

Heredity is conceded by all authorities to play an important rôle in epilepsy—not the direct transmission of the disease, but the transmission of a brain particularly susceptible to irritation. Aside from the cases giving distinct family histories of neuroses of various sorts, the parents of epileptics will often be found of a very low order of intelligence. They are stolid, dull-witted, unstable, the subjects of vicious habits, without discoverable morals, appear to suffer from defective nutrition and procreate idiots, imbeciles, criminals or epileptics. The writer has particularly observed such cases among the relatives visiting the epileptic insane of the Manhattan state hospital. Of all visitors the blood relations of epileptics are the most stupid, unreasonable and disagreeable with whom, as a class, dispensary and hospital physicians have to deal. It is probable that the same conditions which predispose to an irritable and unstable cerebral cortex gives rise also to a defective circulatory and lymphatic activity.

In terminating, the writer would invite attention to the following conclusions: (1) While we may have a definite focus of irritation, as in Jacksonian epilepsy, this focus is alone scarcely sufficient to account for all the symptoms which together constitute a true attack of grand mal. (2) No such focus is discoverable in the majority of cases and the post mortem examination reveals little evidence of cerebral disease that can be considered as characteristic. (3) The one feature most often seen in patients dying of status epilepticus is an increase in the quantity of cerebro-spinal fluid. (4) This fluid, fully capable of producing pressure, must be regarded as an important factor in the etiology of epilepsy. (5) The increase in the quantity of cerebro-spinal fluid is probably more or less gradual during the period immediately preceding the convulsion and would, therefore, account for the "diffused" auras which are so indefinite as often to escape notice. (6) The absorption of the surplus of this fluid is probably facilitated by the relaxation occurring during the period of unconsciousness, and if this does not occur the irritant remains and status epilepticus results. (7) The increase of this fluid

is rendered possible probably as a result of lymphatic and excretory inactivity. (8) Toxemia probably aids in the production of a convulsion by diminishing the resistance of the cells of the cortex or by increasing the quantity and irritant powers of the cerebro-spinal fluid. (9) Lastly, heredity is of importance by producing an organism in which circulatory, lymphatic and excretory functions are illy balanced, and containing a brain that is easily irritated and badly nourished.

1106 MAIN STREET.

A CENTURY OF MEDICAL HISTORY IN THE COUNTY OF ERIE. 1800 1900.

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

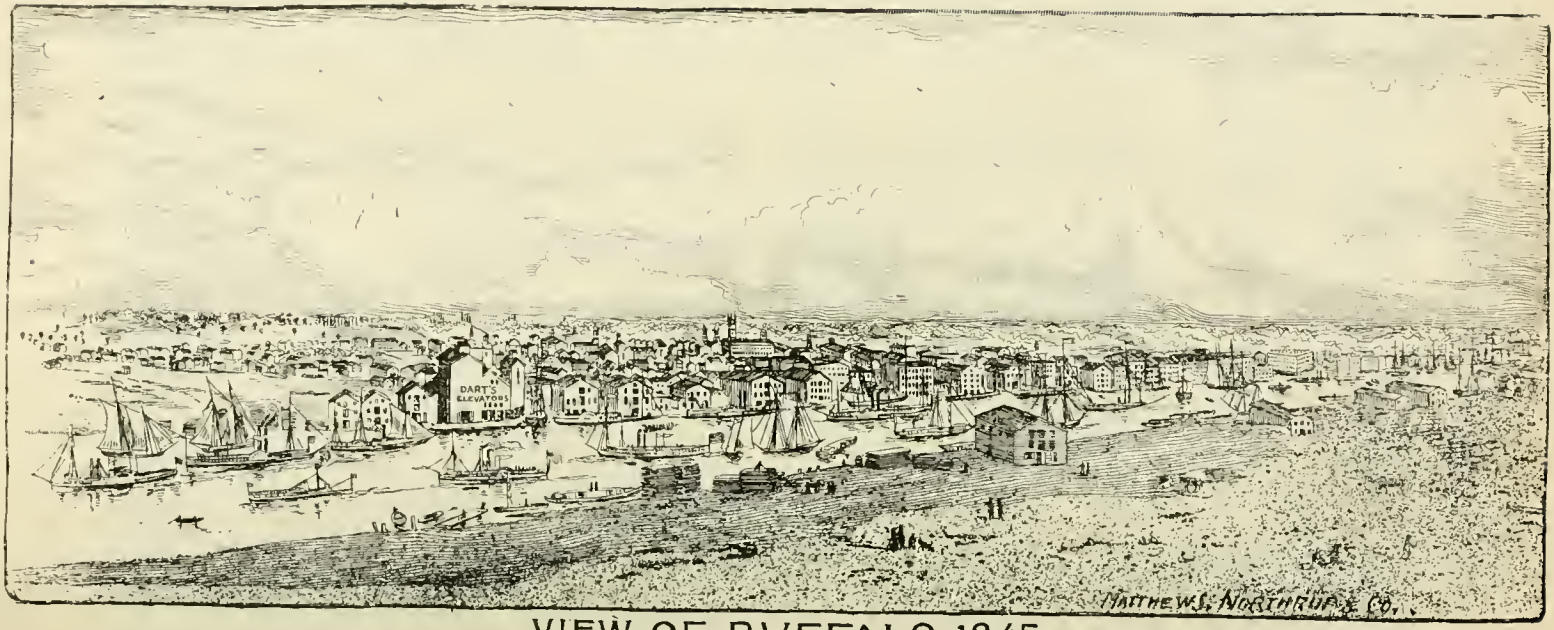
Pioneer Physicians—Medical Societies—Medical Colleges—Hospitals—Medical Journals—Medical Officers of the Civil War—Women Physicians—History of Homeopathy—Individual Members of the Profession.

[*Continued from the May edition.*]

1844—James Allen, Gilbert McBeth, William Treat, James B. Samo, Isaac Parsell, Samuel S. Prudden, Samuel G. Bailey, John Hauenstein, John S. Trowbridge, George N. Burwell and Jesse F. Lock.

The contribution of this year, too, contains a group of physicians, many of whom attained prominence. William Treat, who came to Buffalo from Maine, was elected to membership in 1844, and became president in 1860. He was a man of literary attainments and contributed several valuable papers to the BUFFALO MEDICAL JOURNAL. In July, 1861, after the battle of Bull Run, he went to Washington and repaired to Fort Runyon, an earthwork on the Virginia side of the Potomac near the end of Long Bridge, where he was assigned to duty in caring for the wounded as they came from the battlefield. Afterward he also assisted at the city hospital in rendering a similar service. At a meeting of the Buffalo medical association, held in August, 1861, he gave an interesting account of his observations and, singularly and sadly, died before the month ended. Dr. Treat commanded the respect of his colleagues as well as a large clientèle.

Two members were chosen in 1844, one of whom is still living, who were active participants in the work of the society for more than forty years. James B. Samo, a native of New Jersey, one of these, was elected librarian in 1852 and became president in 1862. He was local marine hospital surgeon from 1853 to 1859 and he enjoyed the respect and confidence of his professional friends during his long



VIEW OF BUFFALO. 1845.

period of membership in the society. He was librarian for forty years—namely, from 1852 to 1892. He died March 12, 1897, aged 85 years.

John Hauenstein, still living though retired from active practice, became a member in 1844, and was chosen president in 1881. He has read many excellent papers before the society, one of the latest on the First uses of anesthetics in Buffalo, at the seventy-fifth anniversary meeting of the society, January 14, 1896. This paper was published in the March, 1896, edition of the BUFFALO MEDICAL JOURNAL. Another contribution, entitled A résumé of fifty years' obstetric practice, was published in the same journal in its issue for June, 1897. Dr. Hauenstein, having ceased the active practice of a profession that he has so long adorned, lives in the enjoyment of good health and the respect and confidence of a large community.

Samuel G. Bailey also united with the society in 1844. He had been a pupil of Dr. James P. White and was elected treasurer in 1852, holding to and including 1855. He ceased to be a member in 1856.

John S. Trowbridge, son of Josiah Trowbridge, was one of the accessions in 1844 and in 1845 he was chosen a censor of the society, continuing as such during 1846. In 1848 he was elected secretary, holding office until 1851. At the annual meeting of the society, January 12, 1869, Dr. Trowbridge read a biographical sketch of his father, Josiah Trowbridge, which was also read a week later before the Buffalo Historical Society and sent out with the February, 1869, issue of the BUFFALO MEDICAL JOURNAL. About the year 1874 Dr. Trowbridge retired from the practice of his profession and established a drug store at the corner of Niagara and Carolina streets. He died April 2, 1886, aged 69 years.

George N. Burwell was one of the accessions in 1844 who acquired fame in the profession and who for many years was active in the councils of the society. He had an extensive following among rich and poor and may justly be rated as one of Buffalo's most successful physicians. He died May 15, 1891, aged 71 years.

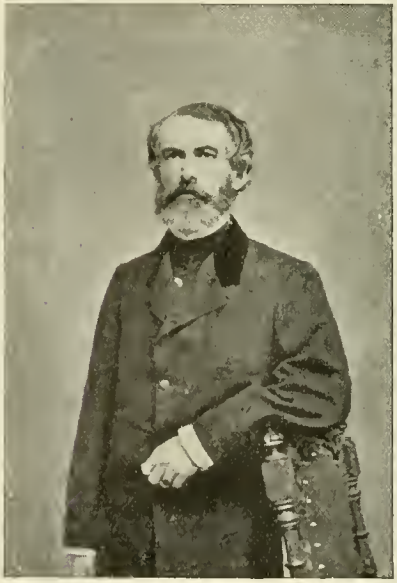
Officers for 1844—President, William K. Scott; vice-president, Orlando Wakelee; secretary, James P. White; treasurer, H. N. Loomis; librarian, Josiah Trowbridge; censors, F. L. Harris, H. H. Bissell, C. H. Raymond, Isaac Parsell, George H. Lapham; delegate to state society, Alden S. Sprague.

1845—Frank Hastings Hamilton, —— Rogers,[1] Caleb H. Austin.

Frank Hastings Hamilton, who joined the society in 1845, came to Buffalo from Geneva, where he had been teaching anatomy and surgery for several years. In 1846 he was elected professor of surgery in Buffalo Medical College, which chair he held until 1860. He

1. Christian name does not appear on the records.

was a censor of the society from 1851 to 1856 inclusive; was elected vice-president in 1856 and president in 1857. In 1851 he became a permanent member of the state society and was elected president of the same in 1856. During the fifteen years of his residence at Buffalo Dr. Hamilton was a constant contributor to the BUFFALO MEDICAL JOURNAL, in which he published his early fracture tables and papers relating to deformities after fractures, contributions that laid the foundation for his future classic treatise on fractures and dislocations, a work that has been translated in several foreign languages. In 1860 Dr. Hamilton removed to New York, becoming professor of surgery at the Long Island College Hospital, was chosen to the same chair at Bellevue Hospital Medical College upon its organisation in 1861. Dr. Hamilton died August 11, 1886, at the age of 73. Perhaps no man of his time contributed more to maintain the *esprit de corps* of the profession of medicine than did this educated, accomplished and upright surgeon.



FRANK HASTINGS HAMILTON, M. D.

It was during 1845 that the BUFFALO MEDICAL JOURNAL was established, and we find in the records of the society a subscription order for six copies, by which act the society testified its loyal support of the JOURNAL.

Officers for 1845—President, Orlando Wakelee; vice-president; F. L. Harris; secretary, Charles Winne; treasurer, Horatio N. Loomis; librarian, Josiah Trowbridge; Censors, Austin Flint, George N. Burwell, S. F. Mixer, John S. Trowbridge and T. T. Lockwood.

1846—G. D. Stevens, Archibald S. Clark, Daniel Devening, Sidney W. Cole.

At the annual meeting, January 13, 1846, Dr. Josiah Trowbridge offered a resolution instructing the committee on books to invest the money in the hands of the treasurer after June 15th in the purchase of rare and valuable books, this action being the foundation of a library.

Officers for 1846—President, Francis L. Harris; vice-president, Isaac Parsell; secretary, Charles Winne; treasurer, Horatio N. Loomis; librarian, Josiah Trowbridge; censors, J. B. Pride, John S. Trowbridge, George N. Burwell, William K. Scott, S. F. Mixer; delegate to the state society, Alden S. Sprague.

1847—Joseph Peabody, Walter Cary, James M. Newman, Ewald Beckendorf, Phineas H. Strong and S. W. Sole.

James M. Newman, who joined the society in 1847, had been a student of Dr. James P. White. He held the office of secretary from 1852 to 1859. The records of the society during that period are among the best in the volume. Dr. Newman was appointed health physician of Buffalo in 1854 and he became attending physician at the Buffalo General Hospital in 1858. He removed from Buffalo in 1859 and died in 1860, lamented by everyone who knew him. He was a young man of rare promise and left a name to be revered and an example to be emulated.

Phineas H. Strong, a native of Vermont, came to Buffalo in 1846, was elected to membership in 1847, to the presidency in 1853, and was chosen a delegate to the state society in 1855. He became a permanent member of the latter in 1859. He was appointed health physician of Buffalo in 1859, and following his appointment submitted the question of accepting it at a less compensation than that fixed by the fee bill to a vote of the society. Dr. Strong was an occasional contributor to the BUFFALO MEDICAL JOURNAL. He was appointed professor of medicine at Howard University, Washington, D. C., soon after its organisation, which chair he held for three years. He died at Buffalo, February 10, 1890, aged 72 years.

Walter Cary, a son of Trumbull Cary, was born at Batavia, December 21, 1818. He received his academic degree at Union College in 1839 and took his doctorate degree from the University of Pennsylvania in 1843. After serving a term in Blockley Hospital he went abroad for study. On his return he established himself in practice and so continued for about ten years, a large part of the time as a partner of Dr. Charles Winne. He then retired, living in ease and in the cultivation of his friendships and tastes. He died at Marseilles, France, November 1, 1880, aged 62 years. His body was cremated by his direction and his ashes were interred at Forest Lawn, Buffalo.

Officers for 1847—President, Isaac Parsell; vice-president, Charles H. Austin; secretary, George N. Burwell; treasurer, Josiah Barnes; librarian, Josiah Trowbridge; censors, James B. Samo, S. G. Bailey, Charles H. Wilcox, S. F. Mixer and J. B. Pride.

1848—J. P. Dudley, James E. King, Charles House, Carlo Schmidt, Joseph Felegmacher.

At the annual meeting, held January 11, 1848, Dr. William Treat, from a committee previously appointed to collect the names of regular and irregular practitioners of medicine, made a report. He presented the names and locations of seventy regular, thirty-two irregular and twelve undetermined practitioners in the county. In the city of Buffalo alone there were thirty-eight regular, twenty-one irregular physicians and four whose mode of practice was not determined.

Dr. Walter Cary, who had been appointed orator of the day, was not present. Dr. Cary was, however, appointed a delegate to the American medical association. His associates were Drs. Bryant Burwell and Alden S. Sprague.

Officers for 1848—President, C. H. Austin; vice-president, Charles Winne; secretary, John S. Trowbridge; treasurer, Josiah Barnes; librarian, Josiah Trowbridge; censors, Bryant Burwell, Horatio N. Loomis, Erastus Wallis, William Treat, H. H. Bissell; delegate to the state society, Horatio N. Loomis.

1849—Charles W. Harvey, Cornelius C. Wyckoff, Edward Mackey, Henry D. Garvin, William King, J. J. C. Haxsteen, L. P. Dayton and John D. Hill.

Cornelius Cox Wyckoff, who joined the society in 1849, is a native of Romulus, N. Y., and located at Buffalo in 1848. He was president in 1858; permanent member of the state society in 1867 and a member of the state board of censors from 1870 to 1883. He has been attending physician to the Buffalo general hospital since 1858. Dr. Wyckoff is still engaged in active practice and has attained high standing in the profession, while at the same time he enjoys the confidence of all who know him, his circle of acquaintance being very large. In 1898 he was appointed by Mayor Diehl a park commissioner.

Charles W. Harvey, who joined the society in 1849, was for many years a successful dentist in Buffalo, though he always kept in touch, at least during the years of his active life, with the guild of medicine. The name of his son, Dr. Leon F. Harvey, is still borne on the list of active members, though he lately removed to Denver, Colorado.

L. P. Dayton, who joined during 1849, was vice-president in 1858 and president in 1859. He was mayor of Buffalo in 1874-75 and is still engaged in the practice of his profession, holding the esteem of his colleagues and of the many people who know him.

John D. Hill, who joined the society in 1849, was expelled from membership at the annual meeting June 9, 1855. Subsequently he

was restored to membership on an order of the court and was elected president of the society in 1888. Dr. Hill acquired a large practice and was respected by the community in which he lived for so many years. He died February 27, 1892, in the seventieth year of his age, lamented by a large circle of friends.

Officers for 1849—President, Erastus Wallis; vice-president, Charles H. Wilcox; secretary, John S. Trowbridge; treasurer, Josiah Barnes; librarian, Josiah Trowbridge; censors, Alden S. Sprague, George N. Burwell, James M. Newman, Horatio N. Loomis, William Treat; primary board, Horace M. Congar, Walter Cary and H. W. Barrett.

The duty of the primary board was to examine and certify to the preliminary acquirements of pupils about to begin the study of medicine. Here this society took the initiative in an important movement that resulted years afterward in establishing the principle by statutory law.

1850—E. P. Gray, L. J. Ham, Patrick Flood, J. E. Camp, Hugh B. Vandeventer, James S. Hawley, S. E. S. H. Nott, George Johnson, O. H. Needham.

L. J. Ham, who joined the society in 1850, came to Erie county from Maine in 1846, locating at Williamsville. He was elected president in 1852, but removed to South Bend, Ind., in 1859. He served during the war as surgeon of the 48th Indiana volunteers and was chairman of the operating board of surgeons of the 7th division of the 17th army corps in 1863-64. He also served as medical director of the 17th army corps under General McPherson. In 1871 he sent his portrait to the society with an autobiographical sketch, and on motion of Dr. Storck the society presented its thanks to Dr. Ham, wishing him many years of happiness and success.

S. E. S. H. Nott was a prominent physician at Hamburg for many years and he was elected one of the coroners of Erie County.

E. P. Gray was in active practice in Buffalo for several years, but removed west and died at St. Joseph, Mo., August 9, 1872.

Hugh B. Vandeventer was appointed demonstrator of anatomy at Buffalo Medical College in 1860. He subsequently removed to Long Island, where he died in 1890.

Officers for 1850—President, Charles H. Wilcox; vice-president, George N. Burwell; secretary, John S. Trowbridge; treasurer, Josiah Barnes; librarian, Josiah Trowbridge; primary board, Walter Cary, James M. Newman and H. W. Barrett; censors, Alden S. Sprague, J. E. Camp, J. B. Samo, H. N. Loomis, William Treat.

1851—Charles C. Jewett, Sandford Eastman, P. Barber and William Gould.

Sandford Eastman, who joined the society in 1851, was elected president in 1861. He was professor of anatomy in Buffalo Medical

College from 1859 until 1870, during which time he was also surgeon at the Buffalo general hospital and the hospital of the Sisters of Charity. He was appointed health physician of Buffalo, serving for several years. He acquired a large practice, was respected by all who knew him, and died January 8, 1874, aged fifty-three years.

Officers for 1851—President, Alden S. Sprague; vice-president, Horatio N. Loomis; secretary, Gorham F. Pratt; treasurer, Josiah Barnes; librarian, Josiah Trowbridge; primary board, George N. Burwell, E. P. Gray and J. E. Camp; censors, Frank H. Hamilton, Bryant Burwell, John D. Hill, John Hauenstein and J. D. Garvin.

1852—John C. Dalton, Jr., M. B. Norton, Hugh McVean, A. S. Griswold, Charles H. Barber, John Root, Ernest G. Pussikofer and Orlando K. Parker.

John Root was a prominent physician in Buffalo for many years, during a portion of which time he held the office of health physician. He removed to Batavia in 1858, where he acquired a large practice and died November 29, 1876, aged fifty-two years.

Orlando K. Parker, who joined the society in 1852, was elected president in 1869, and acquired fame as a practitioner of medicine in the town of Clarence. He died November 16, 1872, aged forty-six years.

John C. Dalton, Jr., the famous physiologist, never held office in the society, but his name deserves special mention in connection with his celebrity as a teacher of his chosen specialty. He taught physiology in Buffalo medical college for several years, then removed to New York, where he died February 12, 1889, aged sixty-four years.

Officers for 1852—President, L. J. Ham; vice-president, P. H. Strong; secretary, James M. Newman; treasurer, S. G. Bailey; librarian, James B. Samo; primary board, Sandford Eastman, J. E. Hawley and William Ring; censors, Frank H. Hamilton, John G. House, William Van Pelt, H. M. Congar and William Treat.

1853—E. D. Merriam, Alfred S. Spearman, J. J. Edmonds, Edward E. W. Gail, John Boardman, Ellery P. Smith, Benajah T. Whitney, John A. Jeyte, Joseph R. Smith.

John Boardman, who entered the society in 1853, had been a student of Prof. Frank H. Hamilton, and was elected president in 1868. He was sent as a delegate to the state society in 1855, and became permanent member thereof in 1862. In 1864 he represented the medical society of the state of New York in the National Quarantine and Sanitary Convention. Dr. Boardman has been a frequent contributor to the BUFFALO MEDICAL JOURNAL and assisted Dr. Hamilton in preparing his fracture tables, besides doing original work in that

and other branches of surgery. In 1854 he was elected demonstrator of anatomy in Buffalo medical college and became attending surgeon at the hospital of the Sisters of Charity. Dr. Boardman still resides in Buffalo, where he has enjoyed for many years a very large practice among the most substantial citizens, though he has now retired from his active labors.

E. D. Merriam joined the society in 1853. He now resides at Conneaut, O., still pursuing the active practice of his profession, enjoying the confidence of a large clientèle.

Joseph R. Smith, who became a member in 1853, entered the regular army as assistant surgeon, and during a portion of the civil war served as assistant on the staff of the surgeon-general, U. S. Army, at Washington. He is now on the retired list of the army with the rank of colonel and resides at Philadelphia.

SANFORD B. HUNT, M. D.

The society gave its first annual dinner, June 14, 1853, at the Clarendon hotel, at 3 o'clock p. m. This was an interesting event that had been looked forward to for some time in pleasant anticipation. After a few years the custom was discontinued much to the regret of many who remember the occasions as delightful reunions.

Officers for 1853—President, Phineas H. Strong; vice-president, John G. House; secretary, James M. Newman; treasurer, S. G. Bailey; librarian, Josiah Trowbridge; primary board, Sandford Eastman, William Ring, J. E. Hawley; censors, Frank H. Hamilton, James B. Samo, William Van Pelt, William Treat and H. M. Congar.

1854—Sanford B. Hunt, Charles L. Dayton, T. W. Wood, Thomas F. Rochester, Richard W. Nelson, C. C. F. Gay, Austin W. Nichols, Frederick W. Gardner, C. B. Hutchins, Charles B. Richards, Edward Storck, William A. Newell and Joel Underhill.

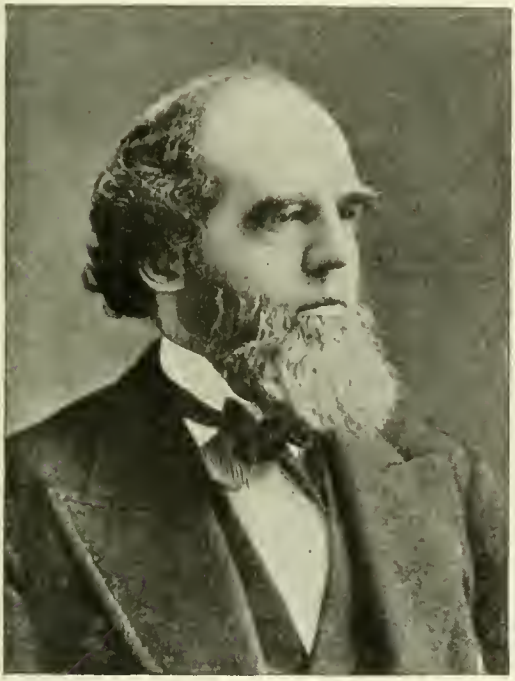
Sanford B. Hunt, who became a member in 1854, during the same year was appointed professor of anatomy at the Buffalo Medical College. In 1853 he became associate editor of the BUFFALO MEDI-

CAL JOURNAL and in 1855 the magazine passed into his hands as sole owner and editor. At the semi-annual meeting, June 13, 1854, Dr. Hunt was the orator of the society and his subject was Cranial characteristics and powers of human races. This paper was published in the BUFFALO MEDICAL JOURNAL and attracted great attention. In February, 1855, Dr. Hunt delivered the valedictory address to the graduating class of the Buffalo medical college. This, too, was published in the BUFFALO MEDICAL JOURNAL and was a model in rhetoric, metaphor and diction. Dr. Hunt was a ready writer and did much to improve the literary taste of the medical profession. He was elected superintendent of public schools in 1858 and was also city editor of the *Buffalo Commercial* until 1861. During the latter year he entered the army as surgeon of United States volunteers, serving to the end of the war. He died at Irvington, near Newark, N. J., April 26, 1884, and his remains were brought to Buffalo for interment. A further notice of Dr. Hunt is given under the title of medical journals.

Thomas F. Rochester came to Buffalo from New York in 1853, and joined the county society in 1854. He was chosen professor of the principles and practice of medicine and of clinical medicine at Buffalo medical college on the resignation of Dr. Flint in 1853. Dr. Rochester became a permanent member of the state society in 1870, and was president in 1875. He occupied a prominent position in the professional as well as in the public affairs of Buffalo, taking specially active interest in the Buffalo Fine Arts Academy, of which he was president for many years. Dr. Rochester did a very large consulting practice throughout western New York, and maintained his activity up to within a few months of his death, which occurred May 27, 1887, when he was sixty-three years of age. A further reference to Dr. Rochester will be found under the head of medical colleges.

C. C. F. Gay, who joined the society in 1854, was a native of Massachusetts, and located at Byron, Genesee county, in 1847. He came to Buffalo in 1861, and served as president of the society in 1865. He was made permanent member of the state society in 1861, and was consulting surgeon at the Buffalo general hospital for many years. In 1878 he was chosen surgeon-in-chief of the Buffalo surgical infirmary, and in 1883 became professor of clinical and operative surgery at the medical department of Niagara university. The later years of his life were devoted to the practice of surgery, in which he acquired skill and fame. Dr. Gay died March 27, 1886, aged sixty-four years.

Edward Storck, who also joined the society in 1854, was appointed a member of the Union Defense Committee in 1861, and afterward served as surgeon at Fort Porter during the organisation of troops for the field. He was president in 1878, and served as chairman of the board of censors from 1880 to 1892—twelve years—when he resigned the office. During the entire period of his service quacks and irregulars had a sorry time in Buffalo, for Dr. Storck pursued them with all the energy that the law permitted. At the time of his resignation the society tendered him a vote of thanks for his faithful and meritorious services. He published a sketch of the work of the board during his administration in the BUFFALO MEDICAL JOURNAL, July, 1896. He was instrumental in securing legislation favorable to the society as well as in preventing that which would prove adverse to its interests. Dr. Storck acquired a large practice. His death occurred July 26, 1897, when he was 66 years of age.



THOMAS F. ROCHESTER, M. D.

Officers for 1854—President, John G. House; vice-president, James P. White; secretary, James M. Newman; treasurer, S. G. Bailey; librarian, J. B. Samo; primary board, Sandford Eastman, William Ring, James S. Hawley; censors, Frank H. Hamilton, J. B. Samo, William Treat, William Van Pelt and H. M. Congar; delegates to the state society, Thomas F. Rochester, H. M. Congar, James P. White and John G. House.

1855—J. C. Gay, Julius F. Miner, Edward Tobie, George Abbott, Samuel T. Hance and D. W. Hershey.

Julius F. Miner, who joined the society in 1855, was a decided accession to its membership. He reëstablished the BUFFALO MEDICAL JOURNAL, 1861, and in 1867 he was appointed professor of ophthalmology and surgical anatomy at the Buffalo medical college, a title that was changed in 1870 to professor of special and clincal surgery. He became a permanent member of the state society in 1869, and was president of the county society in 1870. Dr. Miner was a skilful surgeon, one of the most amiable of men, and a useful citizen. He was especially endeared to his pupils, who were numerous and who manifested their attachment to him on every and all occasions. He died November 6, 1886, aged 63 years.

CHARLES C. F. GAY, M. D.

At the annual meeting of the society, June 9, 1855, Dr. Edward Storck stated that the reputable German medical practitioners of the city had formed a society for their own benefit and for their protection against quackery as practised by unqualified practitioners among the German population; that the members of the said society were desirous of becoming legalised practitioners of medicine and of uniting with the Erie county medical society. He desired information as to the necessary steps to be taken to accomplish these objects. On motion of Dr. Charles H. Wilcox a committee was appointed to confer with the German society and to

furnish information and assistance in accomplishing the objects sought. This action led to the adjustment of the relations between the two groups of physicians at interest.

EDWARD STORCK, M. D.

Officers for 1855—President, James P. White; vice-president, William Van Pelt; secretary, James M. Newman; treasurer, S. G. Bailey; librarian, James B. Samo; primary board, Sandford Eastman, William Ring, James S. Hawley; censors, Frank H. Hamilton, James B. Samo, William Treat, William Van Pelt and H. M. Congar.

(*Continued next month.*)

REPORT OF A CASE OF PUERPERAL DIPHTHERIA INVOLVING VAGINA AND ENDOMETRIUM.[1]

By S. L. ELSNER, Rochester, N. Y.

PUERPERAL fever or puerperal sepsis is, at present, a very rare complication with which we, as skilled obstetricians, have to cope. It is still common enough to be called in by the midwife to make clean what she has carelessly allowed to become infected. Occasionally, however, we ourselves suffer by the gross negligence of a nurse whose training in asepticism has been overlooked. Aside from the interest that this case may have for us, I report it principally to impress upon you the importance of its prevention under like circumstances. After an investigation by the health board of the city of Rochester, they found that my nurse had cared for her own daughter with a sore throat only three days prior to her going into the service of my patient. It was further found that she called at a drug store and told the clerk that she wished him to prescribe for her daughter, since, if she called a physician, he might placard her house.

On the second morning after labor, when I called, I found that the bichloride douche ordered had not been given. The nurse excused herself by saying that the douche bag was not in perfect order, but that she would attend to it at once. On the fourth morning I found my patient with a slight elevation of temperature and on inquiring learned that the douche had not been given. Now, the ignorant attendant said that she did not give it because the patient flowed more freely, and she thought that this would be quite douche enough. I insisted upon the nurse's discharge, but she was retained because of her high proficiency in the culinary art. During the early morning of the fifth day this patient had her first chill and on my arrival I found her with a temperature of 104 3-5 degrees F.; pulse, 135; pain in the vagina, extending upward into the sides. Examination with speculum showed a marked change from a few days before. The entire vagina, cervix and as far as one could see into the cervical canal was coated with one mass of diphtheritic membrane. Dr. J. W. Whitbeck saw the case with me during the day and agreed that we had a diphtheritic infection to deal with. I at once made a culture and the specimen was loaded with the typical Klebs-Löffler bacillus. Subsequent cultures were likewise reported by the health board. On the sixth day she again had a chill with a temperature

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, at Buffalo, October 19, 1897.

reaching 105 degrees. Her uterus had already been irrigated and the curette failed to find anything aside from diphtheritic membrane. This chill and fever was not ascribed entirely to the diphtheria, since some noticeable enlargement could be felt on the left side and diagnosticated as salpingitis. The local condition, however, was unaltered and she was given 2,000 units of antitoxin with the result of a gradual disappearance of the membrane in sixty hours. This brings us to the ninth day. The cultures now failed to show any Klebs-Löffler bacillus. The baby was also given a small dose of antitoxin and kept in the contagious pavilion of our city hospital by the side of the mother. Not the slightest symptoms of infection followed in the child.

The mother's treatment aside from the antitoxin was quinine internally and douches with intrauterine irrigation of lysol, 1 per cent. solution, locally. The vulva, after being shaved, was kept covered with an aseptic pad, and the labia separated by gauze. These dressings were changed every two or three hours. The case from this on presented nothing but the usual manifestations and symptoms of an ordinary pyosalpinx, with but one exception—the pulse would remain slow. The patient would have a chill, followed by a temperature of 103 to 105 degrees F., and on one occasion 106 1-5 degrees F., and yet the pulse-rate would not exceed 105. For the most of the time her pulse would run from 78 to 90. This slow heartbeat was afterward explained by the fact that when she reached a stationary normal temperature her pulse would vary between 56 and 68 per minute.

Between the ninth and sixteenth day of her illness she suffered considerable pain and her condition was precarious. Her temperature ranged from 103 to 106 degrees F., and she presented every appearance of a bad septic case. It was deemed advisable to attack the left tube and in order to decide as to the route, whether vaginal or abdominal section be made, I thought it advisable to thoroughly map out the local condition. After a rather severe vaginal examination, I noticed upon withdrawing my hand that it was besmeared with pus and blood. Upon inspecting the vagina the nurse found that it contained about half ounce of the same discharge. This manipulation ended all her symptoms. The next day her temperature was normal, her pain had vanished, the enlargement of the left tube could not be made out and the patient mended immediately and made a rapid recovery. She left the hospital on the twenty-sixth day after the birth of her child, just twenty-one days after the appearance of the diphtheritic membrane. She has remained well, and at present,

about three months since her discharge, she presents no signs of her former trouble.

As a matter for statistics, I would state that this is the second case of puerperal vaginal diphtheria that I have seen, the first occurring seven years ago in a patient where I was able to trace the infection to a neighbor's house in which there were two cases of diphtheria. The nurse of this patient was taken suddenly ill, and, in a moment of thoughtlessness my patient's husband called upon the neighbor's wife to attend the patient during that day. This patient presented all the local symptoms in the vagina, but did not develop a salpingitis. She made a complete recovery in spite of the absence of antitoxin and a willing health board to rely upon for cultures.

83 North St. Paul Street.

Progress in Medical Science.

MEDICINE, PATHOLOGY AND THERAPEUTICS.

Conducted by ALBERT T. LYTLE, M. D., Buffalo, N. Y.

PNEUMONIA.

RUSSELL, in a valuable article upon pneumonia (*Medical News*), gives deductions from 134 cases in his private practice. His death-rate was 16.4 per cent. as against 18.1 per cent. from hospital statistics, demonstrating the large fatality of this acute disease. He had seventy-three cases in children under ten years with twelve deaths (16.4 per cent.) His experience would negative the contagiousness of pneumonia by any of the ordinary means; the duration was very irregular, being one to fifteen days. He believes that dulness on percussion and weakened breath-sounds over the affected area are far more constant and safe signs of beginning consolidation than the crepitant râle which is so often absent. In children he finds a fear of falling at the very beginning of the disease, which to him has become almost pathognomonic, the child will be still with high fever and if raised will clutch the nurse and express great fear of falling; they after complain of pain in the stomach in place of in the side. He is guarded in prognosis, emphasising that the course of the disease and recovery therefrom depends upon two important characteristics, the local lesion and the systematic intoxication and that these do not necessarily show either direct or indirect relations; consequently judgment cannot be accurately formed. He says of treat-

ment, "In a disease in which, in fully one-half of all cases, treatment is apparently ineffectual and in which recovery is frequent even when treatment is not attempted, the cases not being seen by a physician, one must speak with great diffidence, especially as regards drugs. I believe that much good may be accomplished by proper treatment, and that it is criminal to permit a patient to be wholly without treatment. In my opinion, treatment consists in rest and care of the heart. Rest is certainly the most essential point in treatment." To obtain rest, beside putting the patient in bed, he allays restlessness by the judicious use of morphine in hypodermic doses of grains 1-8, and makes rest as absolute as possible. He carefully watches the heart and uses strychnin, digitalis and whisky when it flags. He deprecates the routine use of jackets and poultices, but he has had immediate and striking relief from pain and consequent embarrassment of breathing by the application of a poultice, either over the affected area or over the whole chest. He uses cold bathing to control temperature and believes the local application of ice to be theoretically correct, but he has not been encouraged to use it by his experience except in cases of hyperpyrexia.

DELAYED RESOLUTION IN PNEUMONIA.

ALFRED STENGEL concludes a paper in the *Therapeutic Gazette* upon the treatment of delayed resolution in pneumonia as follows: First, that in cases of only slight tendency to delay, manifested by moderate dulness and persistent broncho-vesicular breathing, systematic breathing exercises are of the greatest importance. Secondly, that when considerable dulness persists, active counter-irritation should be practised and tonics and stimulants administered. Thirdly, that the production of aseptic abscesses (by the hypodermic injection of turpentine, one to two cubic centermeters) may be useful; the cases in which this has been tried are too few to warrant absolute conclusions and the treatment is too painful for general application.

OBSTINATE DROPSIES.

TYSON, in the treatment of obstinate dropsies, whether due to heart, kidney or liver, advises practically the same general treatment consisting of rest in bed; restriction of the diet to about one-half to one quart of milk in twenty-four hours in divided doses, and until patient complains of hunger, when the food is gradually increased to meet the demands; free purgation, using large doses of alkaline salts in concen-

trated solution, preferably in the morning, or compound jalap powder, or calomel and soda in large doses. After free catharsis, he begins the use of tincture digitalis in doses of 10 minims, four times a day, which he administers for 48 hours, when if no effect is produced he increases the dose until one drachm is given in 24 hours, then if no effect is obtained he changes the drug; he watches the pulse carefully during the digitalis administration and if it reaches 60 he discontinues it. He uses digitalis intermittently to avoid toxicity and to get effects. As the action of nitroglycerine is to dilate arterioles, he often uses it with digitalis, but he prefers theobromin which occasionally is superior to digitalis and which he gives to the amount of 45 grains in 24 hours, in divided doses, at three-hour intervals and for a period of six days if diuresis is effected; diuretin, a compound containing theobromin, does not seem to have been satisfactory. After theobromin he uses spartem, then strophanthus and then calomel, squill and digitalis. He occasionally uses elaterium, but does not like its uncertain action. He calls upon the skin by means of baths, Turkish, Russian, hot wet packs and hot bottle packs; for drugs he uses pilocarpin in hypodermic injection not exceeding one quarter of a grain, combating dangerous edemia by use of atropin, 1-100 to 1-50 grains, hypodermatically. As a last resort he performs paracentesis, puncture or incision for the purpose of drainage. He relates cases of dropsy from heart, from kidney and from liver to illustrate his methods as above.—*Ther. Gaz.*

ATYPICAL RHEUMATISM.

SINGER (*Med. News*) in discussing a typical rheumatic arthritis before the medical club of Vienna says, "Typical rheumatism is characterised by swelling of the joints and disorders of the skin, heart and serous membranes, which are favorably influenced by salicylates. In 1885, Immerman called attention to certain cases of neuralgia of the trigeminus, beginning with fever and accompanied with swelling of the joints and heart symptoms, and which were favorably influenced by salicylates. Edlefsen called this an embryonic form of polyarthritis, and today we include in it certain cases of sciatica. That chorea is to be classed among the atypical forms of rheumatism is shown by the symptoms in joints and endocardum, as well as by certain bacteriological discoveries. Moreover, polyneuritis has much in common with polyarthritis which it often follows. The post-rheumatic muscular atrophies, which owe their existence to polyneuritis, must be included in this classification. Herpes labialis and herpes zoster may

also be considered as atypical manifestions of rheumatism. Therefore the joint symptoms should be regarded as the most striking rather than the most universal manifestation of rheumatism. The most reliable symptom is fever, which is common to all forms and often extends beyond the period in which there are symptoms in the joints." The etiology, he claims, lies in an infection of the blood.

MEDICAL EDUCATION AND STATE EXAMINATIONS FOR LICENSE.

CONDUCTED BY WILLIAM WARREN POTTER, M. D.,
President New York State Medical Examining and Licensing Board.

EX-CONVICTS CANNOT BE PHYSICIANS.

THE United States Supreme Court, April 18, 1898, affirmed the constitutionality of the act of the New York Legislature of 1895 prohibiting persons who have been convicted of and punished for a crime from practising medicine in the state, the opinion being delivered by Justice Brewer. The question arose in the case of a man named Walker, who had served ten years in a penitentiary for an offense committed in 1878, and after his release set up as a physician. The court held that it was within the police power of the state to enact such a law. Justice Harlan delivered a dissenting opinion, saying the law in effect added to the man's punishment and was ex-post facto.

WISCONSIN STATE BOARD.

THE regular meeting of the Wisconsin State Board of Medical Examiners (*Wisconsin Medical Recorder*) was held in Milwaukee January 11 and 12, 1898. No candidates for registration were examined but all applicants will be examined at the April meeting. A committee was appointed to examine into the condition and standing of the medical colleges of the state and report to the Board. Several charges of violation of the practice law were ordered investigated. The good effect of the present law is seen in the fact that between seventy-five and eighty registration blanks failed to be returned to the secretary, the probability being that the applicants read the requirements of the board and concluded it would be useless to apply for registration. The greatest number of applicants for registration will be at the July meeting, which follows the commencements of the medical colleges. Future meetings of the board will be held as fol-

lows: Milwaukee, the second Tuesday in April; Madison, the second Tuesday in July; Milwaukee, the second Tuesday in October; Oshkosh, the second Tuesday in January, 1899.

OSTEOPATHY IN KENTUCKY.

THE profession of Kentucky (*Western Medical Review*) is to be congratulated on its success in obtaining good legislation. A bill has just passed both houses of the legislature which is an amendment to the practice act now in force, which will make all applicants to practise osteopathy stand an examination before the state board. There was a bitter fight made against the bill by the osteopaths and their friends, but without success. The bill practically prohibits the admission of the followers of Still, for, of course, they cannot pass the required examination.

PUNISHMENT OF A CLERICAL MEDICAL PRACTITIONER.

THE right of a clergyman (*The Texas Medical News*) to attempt to heal by prayer and the laying on of hands has been questioned in New Orleans, where a Catholic priest has been prosecuted for a violation of the State medical-practice law and of a city ordinance relative to clairvoyants, unlicensed practitioners, and the like. The clergyman, while willing to pray over those who desired his services, did not pretend to be able to cure disease, and did not demand any payment for his services, although accepting such small sums as his callers chose to give him. The charge of violating the state law was dismissed, but a fine of twenty-five dollars was imposed for violation of the city ordinance.

KLONDIKE DOCTORS MUST PASS MEDICAL EXAMINING BOARD.

THE *Medical Sentinel*, February, 1898, notifies the numbers of doctors who contemplate trying their fortunes in the Klondike country that it is absolutely necessary for them to pass examination before the Board of Medical Examiners of the Northwest Territory (not British Columbia), whose headquarters is Calgary, of whom Dr. Britt, of Banff, N. W. Territory, is Registrar. The medical law will be enforced by the Provincial authorities. It will save lots of trouble, inconvenience and loss of time for prospecting physicians to read this notice and govern themselves accordingly before they demand nuggets of gold in this country of cold and gold for professional services.—*Virginia Medical Semi-Monthly, Feb. 25, 1898.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor 284 FRANKLIN STREET, BUFFALO, N. Y.

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UNIVERSITY OF NIAGARA.

ANNUAL COMMENCEMENT OF THE MEDICAL DEPARTMENT.

THE University of Niagara observed the thirteenth annual convocation of its medical department on Wednesday, May 11, 1898, at which ten candidates for the degree of doctor of medicine received their diplomas. The board of medical examiners assembled in the morning and tested the training the candidates had received and the value of their equipment to practise the healing art. The following-named members of the board were present: Dr. Frank W. Ross, of Elmira; Dr. Nelson G. Richmond, of Fredonia; Dr. Bentley S. Bourne, of Hamburg; Dr. Julius H. Potter and Dr. L. J. McAdam, of Buffalo. This board conducts its examination independently of and apart from the faculty, its action is final and no candidate whom it rejects can receive his degree. It is stated upon good authority that the graduating class of 1898 passed an uncommonly fine examination.

ALUMNI ASSOCIATION.

The annual meeting of the alumni association was held in the college building on Wednesday, May 11, beginning at 10.30 A. M., at which time Dr. John A. Miller, professor of chemistry, delivered an address of welcome on behalf of the faculty. The routine business of the association was then disposed of. The president of the association, Dr. Frank W. Maloney, of Rochester, delivered his address at the opening of the afternoon session, when he discussed the subject of Rheumatism. Dr. M. Hartwig presented a paper entitled Some remarks about incipient orthopedic cases. Dr. William G. Ring, of Buffalo, read a paper entitled Movable kidney. Dr. L. Pierce Clark, of the Craig epileptic colony, Sonyea, N. Y.,

discussed the Pathogeny of an epileptic fit. Dr. L. J. McAdam, of Buffalo, also presented a paper, the subject of which was Remarks on appendicitis with report of cases.

The officers elected for the ensuing year are as follows: President, Dr. William G. Taylor, of Buffalo; vice-presidents, Drs. Frank W. McGuire and Charles E. Congdon, of Buffalo; secretary, Dr. J. Glen Ernest, of Buffalo; executive committee, Drs. J. J. Finerty, E. A. Forsyth and E. E. Koehler, of Buffalo. The alumni meetings were well attended and a growing interest was manifested in its scientific work as well as in the prosperity of the college. This interest was stimulated in a great measure by the executive committee, whose labors, though arduous, were performed with undiminished enthusiasm. The committee of 1898 consisted of Drs. J. J. Finerty, J. Henry Dowd and H. C. Buswell, who are entitled to great credit for the success of the meeting and for the most excellent banquet served at the Genesee hotel in the evening.

COMMENCEMENT EXERCISES.

The graduating exercises were held at Concert Hall in the evening of commencement day beginning at 8 o'clock. A vast assemblage filled the spacious hall at an early hour, eager to witness the interesting ceremonies and to do honor to the young men who were about to receive their degrees in medicine, as a testimony of four years of hard and earnest work in the acquirement of an honorable profession.

The ceremonies were unusually impressive, for in the conferring of the degrees the university custom of hooding the candidates was observed. When the curtain was raised the faculty of the college was disclosed, already seated. The members of the class, attired in caps and gowns, then took the seats reserved for them in the front and center of the auditorium.

Dr. Eugene A. Smith had been appointed to deliver an address on the part of the faculty, but his duties as an officer of the 65th regiment, N. G. N. Y., made his attendance necessary at the camp of the regiment at Hempstead, preparatory to marching to the seat of war. In his stead the Rev. P. McHale, president and vice-chancellor of the university, delivered the opening address.

The speaker explained that a degree was an ending of one period in learning and the beginning of another. He counseled the graduates to remember that the fundamental idea of the calling of medicine was love of humanity regardless of race, nation, religion or profession.

He paid tribute to the memory of the late Dr. John Cronyn, founder and former president of the medical faculty.

During his address the vice-chancellor read a letter from Miss Elizabeth Cronyn, written on behalf of her mother, congratulating the faculty on the fifteenth anniversary of the founding of the university. With the letter were sent fifteen beautiful roses, one for each year of the life of the institution.

Following his address Vice-Chancellor McHale conferred the degree of Doctor of Medicine upon the following-named graduates: Albert Edward Brennan, of Cheektowaga; Charles Aaron Brownell, Bruce Leon De Witt Cook, Michael Aloysius Sullivan, Clarke Wallace Stewart and William Thomas Griffin, of Buffalo; George Henry Grant, of Rochester; Albert Joseph Lawler, of Elmira; James Munsie of Toronto, Ont., and Richard Edward Sweeney, of New York.

The oath of Hippocrates was administered to the class and Dr. H. C. Buswell then presented each candidate to the vice-chancellor, repeating in each instance a Latin formula to the effect that the applicant was entitled to the honor of the degree. The candidate knelt before the vice-chancellor, who conferred the degree of a full graduate of the university, Dr. John D. Flagg performing the duty of hooding the graduates. The candidates one after another arose, signed the roll and received their diplomas at the hands of Dr. A. A. Hubbell.

The Rev. Charles C. Albertson made the address of the evening, in the course of which he referred to Admiral Dewey and his fight against the Spaniards as a contest between modern and decadent ideas, a sentiment which the audience applauded with enthusiasm. The orator pleaded with the class to preserve clean personal characters and to go out into the world with a deep feeling of the responsibility and honor of the profession.

THE BANQUET.

At the conclusion of the commencement exercises the alumni, faculty, new graduates and guests repaired to the Genesee hotel, where the annual dinner soon afterward was served. Among those present from out of town were Dr. F. W. Ross, of Elmira; Dr. Nelson G. Richmond, of Fredonia; Dr. Frank W. Maloney, of Rochester, and Dr. M. B. Shaw, of Eden.

Covers were laid for about 70 persons and seats at the tables were taken at 10 o'clock. While coffee was serving, the president, Dr. Frank W. Maloney, of Rochester, who acted as toastmaster,

called the assemblage to order and after a few introductory remarks announced the speakers and subjects as follows :

Niagara University, Rev. L. A. Grace; What a Doctor knows about running a city, Dr. Conrad Diehl; War, Rev. C. C. Albertson; My Experience with Malpractice Cases, Hon. Joseph B. Brien; Newspaper Medicine, John J. O'Brien; Alumni, P. H. Hourigan, M. D.

The absence of Mayor Diehl, who was visiting the 65th regiment at Hempstead, and of the Rev. C. C. Albertson, who was engaged elsewhere, rendered it necessary to somewhat modify the printed program, but Dr. F. W. Ross, of Elmira, and others were summoned to fill the breach and when adjournment finally came, some time after midnight, partings were said amidst praises for the officers and committees who had contributed their services so generously and efficiently toward the consummation of a delightful day and evening.

BUFFALO PATHOLOGIC LABORATORY.

IN SIGNING the supply bill containing an appropriation of $10,000 for the establishment at Buffalo of a State Pathologic Laboratory for the investigation into the causes and cure of cancer, Governor Black performed a service to science and the state which cannot be too highly commended. By this broadminded act the Governor has placed the state of New York on a higher scientific plane and opened way to a possible solution of one of the most vexing problems before the medical profession today.

We know there is such a thing as cancer, we know those attacked die ; but no one positively knows how, why or whence it comes, creeping along day by day, eating into the life of its victims night and day, never ending, ceaselessly progressing until finally it kills in a most horrible manner, a burdensome cross during life, a stain and a curse on the family name after death. What is more horrible to the lay mind than the sentence, "There is cancer in the family."

Theories almost without number have been advanced as to the causation of malignant tumors, but the real secret of cancerous diseases is still a mystery. At the present time the most important work doing in the direction of cancer investigation is being carried on by Prof. Sanfelice in Sardinia, and Prof. Roncali in Rome. Both are working under state aid. New York state now comes forward and extends the necessary means for American investigators to begin and carry on the work we hope to a successful issue. The

laboratory will be under the directorship of Dr. Roswell Park and the preparatory work is well under way.

The fact that Buffalo, to quote from a paper on tumors recently read by Dr. Park before the American surgical association at New Orleans, "is near the center of an area some 200 miles in radius, where the death-rate from cancer is larger than any other part of the United States," makes it peculiarly fitting that the state laboratory for the study of this particular affliction should be established here.

And to Governor Black is due the thanks of the medical profession for opening the way to a thoroughly equipped investigation.

BARON LARREY, says the *Medical Age*, whom Napoleon I. called the "most virtuous man I have ever known," at the age of twenty-six years joined the army of the Rhine and was the physician of the so-called "flying ambulance" for twenty-two years. He was present in sixty great battles—Waterloo was one—and 400 engagements. He performed numberless operations and it is said that he did 200 amputations in one day. He operated often on the field—once took off the leg of a high officer in a driving snow storm while two others held a cloak over his patient. His name stands only below that of Ambroise Paré, his great prototype.

BUFFALO is the only city of any consequence in the United States which does not maintain a proper and efficient medical supervision over its public schools. It is not very long ago that the Buffalo school association made an exhaustive report on the condition of the public schools and recommended the appointment of a medical officer whose duty it should be to watch the schools and protect the health of the children.

The report was timely and to the point; and yet, in spite of the urgency of the matter, nothing has been done. Dr. Wende has made the effort, but the board of aldermen sat down on him in that extremely indifferent manner which illy became them as public officers, but which "crowns them gloriously" as politicians.

The cost of this supervision would not have appreciably affected the tax rate, yet the aldermen preferred to take chance with poorly cared for schools rather than spend $1,000 or $1,200 a year to maintain the health of many thousands of school children. But just so long as there are aldermen there will be pot-house politicians, whose ideas of public service are bounded by the line of the wards from which they are elected.

MY SPECIALTY.

I love her; yes, I do,
  Nor blush I to proclaim
That she's my specialty,
  My love for her is gain.

I love her; yes, I do,
  Nor make apology.
Her name, you say? ah, yes;
  'Tis Jennie Cology.

THE medical society of the county of Erie held a special meeting Wednesday, May 11, 1898, at which its members offered their professional services to the families of the soldiers while serving their country in the field.

WITH the yellow flag of Spain trailing in the trough of the sea, with the scares of the yellow newspapers, it is apropos that Prof. Klebs should spring a new yellow fever bacillus on us.

THE common council has recommended the letting of the contract for the disposal of Buffalo's garbage to a new firm, with a new system at a ridiculously low figure. All of which is strange to an outsider, when it is considered that this new system is wholly unknown to anyone except the projectors themselves, and has been shrouded in mystery "deep as the sounding sea" and "dark as the hour 'fore dawn" even since it was first exploited.

AS THE May edition of the JOURNAL was entering the mails Commodore Dewey was engaging the Spanish fleet in Manila bay. In an engagement lasting but a few hours he destroyed eleven war ships and rendered *hors de combat* 618 Spaniards, with a loss on his part of only eight men slightly wounded. This is the first time in the history of the world that a fleet has been destroyed without the loss of a single man killed in the victorious squadron, and places the American commodore, who was promptly created an admiral, among the greatest naval commanders the world has produced.

OBITUARY.

DR. DAVID W. YANDELL, of Louisville, Kentucky, died at his residence in that city May 2, 1898, aged 71 years. Dr. Yandell was the son of the late Lunsford P. Yandell, and both father and son have

been prominent professional figures in Kentucky since the early part of the century. Dr. D. W. Yandell was medical director on the staff of General Albert Sidney Johnston and ministered to the latter's mortal wound at Shiloh, April 6, 1862. He subsequently served with Generals Hardee and Kirby Smith until the close of the war. He then returned to Louisville, resumed the practice of his profession and became a teacher of surgery in the university of Louisville. He was one of the editors of the *American Practitioner and News*, though of late years, on account of his failing health, the editorial conduct of the journal has been entirely in the hands of his associate, Dr. H. A. Cottell. Dr. Yandell was a striking figure, a fine sportsman, a warm friend and a good hater. He will be missed in Louisville in professional and social circles. He is survived by a widow and two daughters residing at Louisville and one brother, who is a physician at El Paso, Texas.

Dr. Isaac N. Quimby, of Jersey City, died at his home May 6, 1898, in the sixty-seventh year of his age. He was a prominent actor in the affairs of the American medical association, where he was generally on his feet whenever there was a debate of a controversial character. His long hair and grizzly beard presented a striking appearance and almost everyone knew him who has ever attended the meetings of the association. He will be greatly missed among his colleagues and by his personal friends, who were many.

PERSONAL.

Dr. Francis T. Metcalfe, of Buffalo, has been appointed acting assistant-surgeon for duty on the hospital ship John Englis, U. S. Army. Dr. Metcalfe has recently returned from a European tour and on his arrival at New York found telegraphic orders directing him to report at once.

The following removals and changes of address are announced:

Dr. Joseph Spangenthal, from 108 E. Genesee to 629 Main street.
Dr. H. Mickle, from 26 Linwood to 526 Delaware avenue.
Dr. A. W. Bayliss, from 378 Genesee to 592 Spring street.
Dr. A. B. Wilson, from 78 Fargo avenue to 51 Eastwood place.

Dr. Daniel Lewis, of New York city, was reëlected as president of the state board of health at its annual meeting held at Albany, May

20, 1898. Dr. Smith, of Syracuse, and Dr. Jones, of Rochester, were selected as a committee to take charge of all questions relating to tuberculosis which may come before the board.

Dr. N. R. Coleman, of Columbus, has been elected president of the Ohio state medical society.

ARMY AND NAVY NOTES.

The war department, at the instance of Surgeon-General Sternberg, has chartered the steamship John Englis, of the Maine Steamship Company, to be used for the purpose of a floating hospital to accompany the army when it undertakes the occupation of Cuba. The Vigiliancia, a comparatively new vessel of generous proportions, was first proposed, but upon inspection she was pronounced inadequate. The John Englis, therefore, has been selected. In addition to serving the purposes of a hospital ship the steamer will become a supply depot from which requisitions for medicines for the use of the troops in the field will be filled. She will also carry a large quantity of ice, which is especially needed in the tropics.

Surgeon-General Sternberg has appointed the following-named physicians who are immune from yellow fever, for service in the army: Dr. John Guiteras, of Philadelphia, who will be stationed at Tampa; Drs. W. E. Parker, and W. W. Calhoun, of New Orleans, also to be stationed at Tampa; Dr. Bernard E. Baker, of Charleston, who will be stationed at Key West, and Dr. Aristides A. Gramonte, a Cuban by birth and who was connected with the health department at New York city. The pay pertaining to these appointments is $150 a month.

Surgeon-General Sternberg is completing preparations for utilising the convent at Key West, which has been placed at his disposal by the sisters in charge for hospital purposes. Accommodations will be made for 250 beds. In addition the department, if necessary, will avail itself of several sugar factories at Key West where there are accommodations for 300 or more beds.

Upon the urgent recommendation of Surgeon-General Sternberg the number of new ambulances ordered under emergency requisition for immediate manufacture on May 3, 1898, was increased from 125 to 325, and the extra 200 have been distributed among the leading wagon builders of the West. These ambulances are to be ready,

under severe penalty, within a month from the above date, a portion to accompany the forces in Cuba and the remainder to be distributed to the volunteer army corps encampments.

SURGEON G. H. TORNEY, U. S. army, of West Point, who was once an assistant surgeon in the navy, has been charged with the duty of fitting out the John Englis for her new uses. She will be equipped with hospital rooms, medicine chests, refrigerating plant and a huge ice box for carrying a large quantity of ice and keeping it in a hot climate. Major Torney will be chief surgeon and he will have five other medical men with him. There will also be six trained women nurses, who are to be secured from the Johns Hopkins hospital, at Baltimore. They will be hired for this work and not enlisted.

THE 65TH REGIMENT, N. G. N. Y., has entered the United States service for the war with Spain. It left Buffalo May 1, 1898, for the state camp at Hempstead, L. I., and was escorted to the Erie railway station by a large military and civic procession amidst the plaudits of more than 50,000 people. Its field and staff is composed as follows:

Colonel, S. M. Welch, Jr.: Lieutenant-Colonel, William H. Chapin; Regimental Adjutant, First Lieutenant Walter F. Nurzey; Regimental Quartermaster, Capt. G. Reed Wilson; Surgeon, Maj. A. H. Briggs; Assistant Surgeon, First Lieutenant Harry Mead; Assistant Surgeon, First Lieutenant E. L. Ruffner; Chaplain, The Rev. H. S. Fisher; Major, First Battalion, C. E. P. Babcock; Adjutant, First Battalion, First Lieutenant J. W. Scribner; Major, Second Battalion, E. A. Smith, M. D.; Adjutant, Second Battalion, First Lieutenant Frank M. Chapin; Major, Third Batallion, J. D. Howland, M. D.; Adjutant, Third Batallion, First Lieutenant A. S. Bixby.

The regiment was mustered into the United States service May 17, and proceeded to Falls Church, Va., May 19, 1898. As Buffalo's first contribution of troops for the war with Spain its progress will be watched with great interest by every patriotic citizen.

DR. LEONARD B. ALMY, of Norwich, Conn., says the Norwich *Courier*, has been tendered by the Surgeon-general of the U. S. army a commission as medical director of a division in the volunteer service with the rank of major. Dr. Almy is at present at Camp Haven, where he is performing duty as a member of the examining board.

THE war department has issued a general order giving extracts from the treaty articles of the Geneva convention bearing on the neutrality to be accorded equipments and individuals engaged in the treatment of the sick and wounded. The department also publishes the regulations which have been adopted for the observance of the treaty, including the requirement that on persons and equipment engaged in caring for the sick and wounded the red cross shall be displayed.

Article VI. of the convention says specifically that wounded or sick soldiers shall be entertained and taken care of, to whatever nation they belong. Those who are recognised after their wounds are healed as incapable of serving shall be sent back to their country. The others may also be sent back on condition of not again bearing arms during the continuance of the war. Commanders-in-chief have the power to deliver immediately to the outposts of the enemy soldiers who have been wounded in an engagement, when circumstances permit this to be done.

COMMANDER ANDREW DUNLAP has been placed in command of the Solace instead of Lieutenant McKethan as stated in the issue of this journal for May. A full description of this naval ambulance ship, the first to be commissioned by any government in the world, is given in the *Medical Record* May 14, 1898. It is written by past assistant-surgeon Edward S. Bogert, Jr., one of the medical officers of the Solace, and is illustrated by section drawings of the several decks and a half-tone photograph of the ship under full sail, flying the Red Cross flag at her fore.

THE Solace has already been of service in action, having received the wounded from the New York after the bombardment of San Juan de Porto Rico by Admiral Sampson, May 12, 1898. In case of an early meeting of the American fleet and the Spanish squadron in Cuban waters, as is anticipated at this writing, it is probable that the Solace will convey the wounded with all possible haste to New York instead of to Key West. In anticipation of the Solace coming to New York, where the hospital facilities are so much superior to those at ports farther south, elaborate arrangements have been made for receiving the wounded and caring for them. If Sampson is as fortunate as Dewey was in the matter of casualties, which can scarcely be possible, the Solace will not return to port, but will continue to cruise with the squadron.

THE Adjutant General of the United States army recently advised Governor Hastings of the necessary physical examinations requisite before volunteers would be permitted to join a state encampment. The result is that an army surgeon and two civilian physicians will constitute such a board of examiners for the state of Pennsylvania. Governor Hastings has therefore appointed Dr. William Pepper, of Philadelphia, and Dr. W. S. Foster, of Pittsburg, to conduct such examination on the part of physicians. In this way it is hoped to restrain those who are physically disabled from joining the militia. Would it not be well to adopt a similar system in New York?

THE President has appointed William Sturgis Thomas to be assistant-surgeon in the navy. Dr. Thomas resides at 68 W. 52d street, New York.

THE following appointments of medical officers for duty in the field have been announced from Washington: Colonel Charles R. Greenleaf, assistant surgeon-general, chief surgeon of troops in the field, attached to the staff of Major-General Miles, commander-in-chief. To be chief surgeons, with rank of lieutenant-colonel, Majors Benjamin F. Pope, surgeon United States army; Robert M. O'Reilly, surgeon United States army; Alfred C. Girard, surgeon United States army; John Van R. Hoff, surgeon United States army; Louis M. Maus, surgeon United States army; Rush Huidekoper of Pennsylvania: Nicholas Senn, of Illinois. To be chief surgeons with the rank of major: William H. Daly, of Pittsburg, Pa.; Clayton Parkhill, of Denver, Col.; Herbert W. Cardwell, surgeon-general, of Oregon; James H. Hyssell, of Pomeroy, O.; Henry F. White, of St. Paul, Minn.; Jefferson D. Griffith, medical director National Guard of Missouri; R. Emmet Giffen, surgeon-general of New York; E. Bockmann, National Guard of Minnesota; Thomas S. Kimball, of Marion, Ind.; Charles B. Nancrede, professor of surgery, University of Michigan; John McG. Woodbury, of New York; Lewis Schooler, of Iowa; George Cook, of Concord, N. H.; James M. Jenne, surgeon-general of Vermont; Leonard B. Almy, medical director, N. G. of Connecticut; Thomas Earle Evans, of Woodward, Ala.

THE selection of medical officers for the 65th N. Y. Volunteers reflects credit upon the profession of Buffalo. Dr. Albert H. Briggs, who has been appointed surgeon, has been an established practitioner of

medicine since 1871, and is well and favorably known in and out of the profession as a well-equipped physician of excellent judgment and undoubted skill. Drs. Mead and Ruffner, who have been appointed assistant-surgeons, are young men of excellent professional standing and will doubtless prove faithful coadjutors of Surgeon Briggs in the medical and surgical care of the officers and men of the 65th, to whom the JOURNAL tenders its congratulations upon this significant fact.

THE 65th N. Y. Volunteers has, besides its regular medical staff, two battalion majors who are physicians. Dr. Eugene A. Smith, major of the second battalion, is one of Buffalo's best known physicians and a surgeon of great skill and judgment. Dr. John D. Howland, a graduate of Niagara university, '91, is major of the third battalion. Dr. Howland is a young man of promise in his profession and will doubtless make his mark as a field officer.

SURGEON-GENERAL STERNBERG of the army has become attending physician to the President and residents of the White House. Past assistant-surgeon Wood, U. S. army, formerly the president's physician, has been appointed colonel of the famous cavalry regiment which is rendezvousing at San Antonio, Texas. The President is fortunate in the selection of his medical adviser.

THE organisation of a hospital corps for the army of invasion is, according to Washington dispatches of recent date, well under way and may be outlined as follows: It will be divided into regimental detachments, ambulance companies, field hospitals, lines of communication hospitals, base hospitals, hospital transports and railway trains, and general hospitals already established in the United States. The last two will be under the immediate direction of the surgeon-general in Washington, and the first five will be in charge of Colonel Greenleaf, assistant surgeon-general attached to the staff of General Miles. Men who are wounded in action will be cared for by those divisions in the order of their numbering, the slightly wounded and the sick being discharged from the field hospitals if their injuries or illnesses are slight and they are capable of quickly returning to duty. Those whose condition is more serious will be transported—carried through the lines of communication hospitals if necessary—to the base hospitals, and only the bad cases who are unfitted for further active service will be sent in the hospital transports and specially fitted railway trains to the general hospitals in the United States.

About 180 medical officers, 60 surgeons and 120 assistant surgeons, will accompany the invading army, the ratio being one medical officer to about 400 soldiers of the line. The medical service will also include about 160 hospital stewards and acting stewards and about 1,200 private soldiers. In addition to the usual equipment of stretchers, 150 ambulances of the most modern design will be used, 100 of which are already with the troops, and remaining 50 were ordered shipped from Indiana to Tampa a few days ago. Not more than one-third of the entire sanitary organisation will accompany the first force of regulars that lands in Cuba, the remainder following with the volunteers.

MEDICAL COLLEGE AND HOSPITAL NOTES.

THE New York University medical college and Bellevue hospital medical college have at last united. It will be remembered that last year a union was attempted between these two famous medical schools and it was defeated on account of differences between the two faculties, then apparently impossible to adjust. Now, however, the amalgamation has been accomplished, an official announcement to that effect having been made by Chancellor MacCracken from the stage of the Metropolitan opera house at the annual commencement of the University medical school, May 18, 1898.

On this occasion 103 graduates received their diplomas, the occasion being enlivened by music from the 7th Regiment Band, and the presence of a house crowded by friends of the institution and of the graduates.

The consolidated institution will be known as the University and Bellevue hospital medical college. The alumni of the two schools, numbering nearly 10,000 graduates, will be placed on the rolls of the university. The two properties, together occupying 225 feet front in East Twenty-sixth street, near First avenue, and costing about $500,000, will be owned by the New York university and used by the united school.

The faculty of the new school will consist of Dr. Edward G. Janeway, dean, and seven professors of the former university medical faculty and twenty-one professors and adjunct professors of the former Bellevue medical faculty, together with such additional professors as may hereafter be appointed. Besides these there are thirty or more lecturers, instructors and assistants.

A MEMORIAL hospital has been presented to the city of Dunkirk by Mrs. F. H. Stevens, of Buffalo, and Mrs. Alfred Solano, of Los Angeles, Cal., joint owners of the handsome residence of the late Horatio Brooks. These charitable women have presented the residence to the Dunkirk Young Men's Association. The building is one of the most imposing structures in that city, having been erected at a cost of $125,000. The main part of the residence will be turned into a memorial hospital in honor of the late Mr. Brooks and the other apartments will be used for a public free library hall and a club room by the Y. M. A.

THE Riverside hospital, at 306 Lafayette avenue, Buffalo, founded by and in charge of Dr. Lillian Craig Randall, having outgrown its present proportions will, it is announced, soon be enlarged to meet the increasing demands made upon it for space. When it was established it was located, first, in a small place in Niagara street, near the river, then to larger quarters in Breckenridge street and about two years ago to the two modern buildings in Lafayette avenue. Now these commodious quarters do not suffice for the increased number of patients and the large class of nurses, so it has been decided to add several rooms, including a splendid laboratory, to one of the buildings.

A NEW hospital for women at Pittsburg, it is announced, will soon be established. A wealthy, charitably disposed lady—Mrs. Miller—who died recently, bequeathed a valuable tract of land in the East End for the purpose of erecting thereon a hospital for women. She also left to this proposed institution a certain sum of money and made it her residuary legatee. The value of the gift will, it is thought, eventually amount to $300,000. The institution is to be known as the Pittsburg hospital for women. The trustees, among whom are Dr. X. O. Werder and Dr. Simpson, have already applied for a charter.

THE Medico-Chirurgical college, of Philadelphia, may now confer D. D. S., Ph. G., and Ph. D. degrees. It is announced that Judge Gordon has dismissed the exceptions of the Philadelphia dental college, which sought to restrain the Medico-Chirurgical college from conferring graduate degrees in dental surgery and pharmacy. The Medico-Chirurgical college's petition to so amend its charter as to

comprehend this broadening of the institution's field of usefulness has accordingly been granted.

THE appellate division of the New York supreme court recently reversed an order which granted Professor Charles B. Kelsey a writ of mandamus compelling the directors of the New York Post Graduate Medical school and hospital to rescind a resolution revoking his appointment as a professor of surgery and restoring him to the privilege and all the rights and privileges incident thereto. Justice Barrett wrote the opinion, which held that the by-laws of the corporation authorised the directors to remove a professor at pleasure.

PUBLIC HEALTH AND HYGIENE.

DR. THOMAS B. CARPENTER, of the Buffalo Health Department, has an exhaustive article on Garbage disposal in the May *Sanitarian*, and ends it by saying, in referring to systems: "It is safe to affirm that no perfectly satisfactory method for all times and all places has yet been devised."

THE *Sanitary Plumber* has discovered that the death-rate among plumbers from Bright's, phthisis, cancer and bronchitis is in excess of the average; from lead poisoning the mortality figure is placed at 19.

THE May *Sanitarian* has a report bearing out the statement of Dr. G. W. Goler, health officer of Rochester, that in formaldehyde disinfection, dryness of the air of the infected room is an essential factor.

SOCIETY MEETINGS.

THE Physicians' club held its annual meeting at the Hotel Ontario, Wednesday evening, May 18, 1898. The following officers were elected for the ensuing year: President, Dr. J. J. Walsh; vice-president, Dr. T. B. Carpenter; secretary, Dr. J. C. Clemesha. Council, Drs. J. H. Dowd, W. G. Ring, A. E. Diehl, T. F. Dwyer and C. E. Congdon.

Dr. Carpenter read a paper on Disinfectants, which was interestingly discussed. The retiring president, Dr. Diehl, then read his annual address, after which the meeting adjourned.

THE Buffalo Academy of Medicine held meetings during the month of May, 1898, as follows:

Section on Surgery—Meeting appointed for Tuesday evening, May 3d, was indefinitely postponed owing to the inability of the essayists to be present.

Section on Medicine—Tuesday evening, May 10th, program: Municipal hygiene, by Drs. H. R. Hopkins and Wm. G. Bissell. Annual meeting and election of officers.

Section on Pathology—Tuesday evening, May 17th, program: Diseases of the antrum of Highmore, by William C. Barrett, M. D., D. D. S. The pathology of the blood, by Dr. Albert E. Woehnert; Exhibition of specimens, by Dr. Edmond E. Blaau.

Section on Obstetrics and Gynecology—Tuesday evening, May 24th, program: Conservative treatment of the ovary, by Dr. H. E. Hayd. Subject to be announced, Dr. B. C. Johnson.

THE American Medical Temperance Association will hold a summer meeting at Prohibition Park, Staten Island, N. Y., July 5 and 6, 1898, under the presidency of Dr. N. S. Davis, of Chicago. Dr. T. B. Crothers, of Hartford, is the secretary, to whom all communications relating to the meeting should be addressed.

THE Cayuga County Medical Society held its ninety-second annual meeting at Auburn, Thursday, May 12, 1898. The following scientific program was observed: The president's address, Dr. John O. Palmer, Auburn, N. Y.; Multiple neuritis, its differential diagnosis and treatment, Dr. Edward D. Fisher, New York, N. Y.; Homing pigeons as medical messengers or bulletin bearers, illustrated by liberation of birds bearing messages, Dr. Charles L. Lang, Meridian, N. Y.; Report of a case, Dr. Frederick Sefton, Auburn, N. Y.

THE Medical society of the County of Erie will hold its regular semi-annual meeting at the room of the Buffalo academy of medicine Tuesday, June 14, 1898, under the presidency of Dr. Lucien Howe. The program of the meeting has not yet been issued.

THE American Medical Publishers' association will hold its fifth annual meeting at Denver, Col., on Monday, June 6, 1898 (the day preceding the meeting of the American medical association). Editors and publishers, as well as every one interested in medical journalism,

cordially invited to attend and participate in the deliberations. Several very excellent papers are already assured, but more are desired. In order to secure a place on the program, contributors should send titles of their papers at once to the secretary, Charles Wood Fassett, St. Joseph, Mo.

THE fourth district branch of the New York State medical association held its fourteenth annual meeting at Buffalo, May 16, 1898. Dr. C. C. Frederick, the president, delivered his address, and Drs. Allen A. Jones, DeLancey Rochester and Charles G. Stockton, of Buffalo, read papers. Dr. William H. Thornton is the secretary.

THE National Confederation of State Medical Examining and Licensing boards will hold its eighth annual meeting at Denver, Col., June 6, 1898. The following program has been arranged by the secretary, Dr. A. Walter Suiter, Herkimer, N. Y.:

(1) Address of welcome, by William P. Munn, health commissioner of Denver.

(2) Response, by vice-president William Bailey, of Louisville.

(3) Report of committee on minimum standards of requirement, N. R. Coleman, chairman, Columbus, O.

(4) Discussion and action thereon.

(5) Report of secretary and treasurer.

(6) Annual address of the president, Uniformity the key to reciprocity, William Warren Potter, Buffalo.

(7) Results of the medical law of New Jersey, E. L. B. Godfrey, Camden.

(8) Results of the medical law of Massachusetts, E. B. Harvey, Boston.

(9) Results of the medical law of Kentucky, Joseph M. Mathews, Louisville.

(10) The Tennessee method, T. J. Happel, Trenton.

(11) Under what conditions is the state of Virginia likely to reciprocate as to standards with other states? R. S. Martin, Stuart.

(12) Some of the practical reasons why Latin and Greek should not be included in the standard of preliminary education required of medical students, Henry Beates, Jr., Philadelphia.

(13) Discussion thereon, J. A. Egan, Springfield, Ill.

(14) On the preparation of questions, Edward Cranch, Erie, Pa.

(15) Paper (subject to be announced), Charles K. Cole, Helena, Mont.

(16) Paper (subject to be announced), A. Walter Suiter, Herkimer, N. Y.

(17) Miscellaneous business.

(18) Election of officers.

(19) Adjournment.

The object of the confederation is to consider questions pertaining to state control in medicine and to compare methods in vogue in the several states; the collection and dissemination of information relating to medical education and to consider propositions that have for their purpose advancement of the standards in the United States. A cordial invitation is extended to all members and ex-members of state medical examining boards and to physicians, sanitarians and educators who are friendly to the objects named to attend the meeting and participate in its proceedings.

The American Medical Editors' association will hold its next annual meeting at Denver, Col., on Monday, June 6, 1898, the day preceding the opening session of the American medical association. The association will be entertained at a banquet on the evening of that day by the local committee on medical journals. Dr. Thomas H. Hawkins is the chairman of this committee.

The University of the state of New York will hold its thirty-sixth convocation in the senate chamber at Albany, Monday, Tuesday and Wednesday, June 27, 28 and 29, 1898. An excellent program has been issued and instructive discussions of the various subjects are expected.

The medical society of the County of Chemung held its annual meeting at Elmira, Tuesday, May 24, 1898. Dr. Frank W. Ross, president, read as his annual address a paper entitled Treatment of metritis. Dr. C. A. Murray, of Van Etten, read a paper on Chloroform in obstetrics.

Book Reviews.

Vade Mecum of Ophthalmological Therapeutics. By Dr. Landolt and Dr. Gygax. Philadelphia: J. B. Lippincott Company. 1898.

In the introduction of this concise, though excellent little work, the authors state that it is not a treatise nor a dictionary. They aim to give a constant companion to the busy practitioner or student preparing

for examination. They presuppose everyone can diagnosticate the various ocular diseases, otherwise the volume would be of no practical value. There are 326 numbered paragraphs, arranged in alphabetical order of the various eye diseases, also the appropriate treatment, systemic and local. The pharmaceutical part has evidently been prepared with care and includes drugs most successfully used for the diseases described.

The direction under antiseptics for cataract operation—to cut off eye lashes and eyebrows—would hardly be popular in this country and seems unnecessary. The introduction of the sulphate of atropia and the sulphate of eserin in the pure state between the lids has not been tried much in this country among the leading ophthalmologists, as the danger of absorption into the circulation must be vastly increased by this method.

Under muscular insufficiencies Dr. Landolt brings forward his well-known ideas of advancement of the weaker in preference to tenotomy of the stronger muscle. Opinions in this country still differ greatly on this point. "The patient hardly ever tolerates permanently the glass completely correcting his myopia" is timely and can be verified by the experience of many who have tried prescribing a full correction. R. H. S.

A SYSTEM OF PRACTICAL MEDICINE. By American authors. Edited by ALFRED LEE LOOMIS, M. D., late Professor of Pathology and Practical Medicine in the New York University, and William Gilman Thompson, M. D., Professor of Medicine in the New York University. Volume III., pp. 926. Diseases of the alimentary canal, peritoneum, liver and gall bladder, spleen, pancreas and thyroid gland, chronic metal poisoning, alcoholism, morphinism, infectious diseases common to man and animals, miscellaneous subjects. Philadelphia and New York: Lea Brothers & Co. 1898.

In the continuation of this comprehensive system of medicine the third volume presents to our consideration the diseases of the digestive tract. First comes diseases of the alimentary canal, in the consideration of which we find an interesting section devoted to affections of the esophagus, presented by Dr. Allen A. Jones, of Buffalo. This organ is subject to so many changes—traumatic, organic and neurotic,—that it is somewhat surprising that its literature is sparse. Jones has conferred a favor on the profession by grouping within the space of 25 or 30 pages nearly or quite all that is known in regard to esophageal maladies. Foreign bodies and other traumatisms, such as are produced by swallowing corrosive poisons, have been avoided in this monograph, yet we are of the opinion that it would be wise to group in a single brochure the whole subject of diseases and injuries of the esophagus.

The consideration of diseases of the stomach is presented in about 100 pages of interesting text by Dr. Charles G. Stockton and Dr. Allen A. Jones in joint authorship. We have called attention in reviews recently written of treatises on the stomach, lately published, to the importance of a knowledge of these affections by the every-day practitioner of medicine. The routine prescribing of pepsin and bis-

muth, or other so-called digestive agents, followed by iron as a tonic, one or all, most generally given empirically, forms approximately the be-all and end-all of the average management of digestive disorders. Stockton was one of the first to plead for more accurate diagnosis and better therapeutics in this direction; and he and his associate, Dr. Jones, have done much to develop improvement in this department of internal medicine. We commend what they have here written to careful study by every general practitioner of medicine.

Of scarcely less interest than the foregoing are Diseases of the intestines, which form the subject of two sections written by William W. Johnston and Henry M. Lyman, respectively. Appendicitis is the subject of a section written by W. F. McNutt. Diseases of the peritoneum are presented by Hobart Amory Hare. Since our knowledge becomes more and more perfected with reference to diseases of the appendix, thanks to Mynter, McBurney, Price and others, the field for the peritoneum has become more limited. The "peritonitis" and "inflammation of the bowels" of former days has now easily become appendicitis. Hare, however, discourses briefly and well upon what little is left for the peritoneum in the light of our present pathology.

Coming now to diseases of the large secretive glands we find those of the liver, gall-bladder and ducts written by J. E. Graham; diseases of the spleen by George Roe Lockwood and of the pancreas by Charles G. Stockton. We have lately come to better understand the functions and disorders of this latter organ, the principal functions of which are to convert starch and sugar into glucose, emulsify fats and coagulate casein. Its diseases are not easy to treat and the one most likely to occur—namely, cancer, is incurable. Stockton has brought our knowledge of the subject down to present date in this carefully prepared monograph. Of late years diseases of the thyroid gland are attracting considerable attention, especially cretinism and myxedema. The affections of that organ are well considered by Francis P. Kinnicutt and M. Allen Starr. The remaining sections of the book are devoted to chronic metal poisoning, alcoholism, morphinism, the infectious diseases common to man and animals and a few miscellaneous subjects, such as purpura, hemophilia, diabetes, insolation and the like.

This is a well-arranged and carefully-prepared volume, handsomely printed and bound, and is a credit to the progressiveness and scientific attainments of American physicians.

ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. By CHARLES E. DE M. SAJOUS, M. D., and 100 associate editors, assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume I. Philadelphia, New York, Chicago: The F. A. Davis Company. 1898.

The issue of the Annual in this new form will be welcomed by the medical profession as an improvement over that which has prevailed during the last ten years. This first volume embraces subjects from

abdominal injuries to and including Bright's disease. The first article contains 150 excerpts, besides the general text. This will give an idea as to the exhaustive nature of the references. The abstracts interpolated in the text are controversially arranged, and aimed to sustain the views advanced by authors, or indicate fields as yet insufficiently explored. The work when completed, according to the editor's statement, will present all the general diseases described in text-books on practical subjects, such as medicine, surgery, therapeutics and obstetrics.

It is expected under the general arrangement adopted that the entire field will be completed in six volumes. At all events, the first volume represents one-sixth of the whole number. The book contains numerous illustrations, it is printed in double-columned pages with new clear-faced type, and is handsomely bound. To say that this is a great improvement over the original Sajous' Annual is giving it faint praise in one sense; but in another it speaks loudly in its favor, because the latter was really one of the most useful compilations of medical literature that had ever been printed. This plan, however, surpasses the other in every respect and will be welcomed in the libraries of every practitioner, teacher or writer who has occasion to consult the literature of medicine.

AN AMERICAN TEXT-BOOK OF GENITO-URINARY DISEASES, Syphilis and Diseases of the Skin. Edited by L. BOTTON BANGS, M. D., Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York, and to the Methodist Episcopal Hospital, Brooklyn; Visiting Genito-urinary Surgeon to St. Mark's Hospital, New York; Late Professor of Genito-urinary and Venereal Diseases, New York Post Graduate Medical School and Hospital; and W. A. Hardaway, A. M., M. D., Professor of Diseases of the Skin and Syphilis in the Missouri Medical College, St. Louis; Physician for Diseases of the Skin to the Martha Parson's Hospital for Children and to St. John's Hospital, St. Louis. Illustrated with 300 engravings and 20 full-page colored plates. Philadelphia: W. B. Saunders, 925 Walnut street. 1898.

This work, which is designated An American Text-book of Genito-urinary Diseases, Syphilis and Diseases of the Skin, is, as the editors inform us, a collaboration of well-known authorities who have not been restricted in regard to the particular views set forth in its pages, but have been offered every facility for the free expression of individual opinion. It certainly sets forth the clinical facts and the principles of treatment, based on the results of modern research, serving not merely as a text-book for the student and practitioner, but also as a work of reference for the expert. It is essentially clinical and practical in its scope. The first subject treated in the work is on Urine analysis and a consideration of the urine in surgical diseases of the urinary tract, by Paul Thorndike, M. D., in which he describes the characteristics and chemical constituents of urine and the commoner and more practical methods for investigating them in a clear and concise manner, in which the various points are treated at a length proportionate to their intrinsic importance.

Diseases of the penis, by B. Farquhar Curtis, M. D., the contents of which are arranged as follows: 1. Absence, reduplication, etc.; 2. Hypospadias; 3. Epispadias; 4. Malformations and contractions of the meatus; 5. Malformations of the foreskin, phimosis and adhesions; 6. Paraphimosis; 7. Injuries; 8. Gangrene; 9. Inflammatory conditions; 10. Tuberculosis; 11. Varicose veins; 12. Neuralgia; 13. Priapism; 14. Tumors.

Of the individual articles there are so many that are excellent that it is difficult to select any for special mention. Diseases of the male urethra, by G. Frank Lydston, M. D., is comparatively brief, considering the importance and frequency of some of the complaints affecting this tract; however, the article is replete with information and one most valuable feature of it is the care and accuracy with which the subject is handled and especially that pertaining to therapeutics.

Diseases of the testicle and its coverings, the cord and the seminal vesicle, by Eugene Fuller, M. D. The article is essentially clinical in character, and gives the impression of being written direct from nature as seen in the consulting room and the hospital ward.

Diseases of the prostate, by J. William White, M. D., and Alfred C. Wood M. D. There is enough of the personal element in this article to give it individuality. The subject, treating on the hypertrophy of the prostate, receives much more than the usual attention. The therapeutical instructions given are full of detail and eminently practical.

Diseases of the bladder, by Edward Martin, M. D., and A. E. Tayler, M. D. Vesical calculus, by Francis S. Watson, M. D. Diseases of the ureter, by Christian Fenger, M. D., and S. C. Stanton, M. D. The surgical diseases of the kidney, by P. R. Bolton, M. D. Functional disorders, by James Pederson, M. D., are the remaining individual articles to be found in the work under genito-urinary diseases. It would be useless to discuss them; they all strike the reviewer at once as being clear, complete and thoroughly modern.

The contributions to syphilis which appear are the views as represented by many of our most noted authorities, and deals with the subject as subjoined: Acquired syphilis, by James S. Howe. Syphilis of the bones, joints, bursæ, tendons and muscles, by Lewis C. Bosher. Syphilis of the respiratory, circulatory, lymphatic and alimentary systems, by John H. Linsley. Syphilis of the nervous system, by Graeme M. Hammond. Syphilis of the eye, by Thomas R. Pooley. Hereditary syphilis, by Abraham Jacobi. Treatment of syphilis, by Robert Holmes Green. Chancroids, by James S. Howe.

In the first portion on Acquired syphilis the subject is honestly met, and the difficulties of differential diagnosis clearly shown. The portion devoted to bones, joints and the like is given in detail in connection with the latest and most scientific methods of treatment. The part of the subject-matter contributed by Dr. Linsley has special merit, being precise without being over-dogmatic; full, but not burdensome. The increasing importance of syphilitic affections of the

nervous system and of the eye meets with a corresponding recognition in this work.

Dr. Jacobi's article on hereditary syphilis exhibits facts and opinions that are logical and judicious with all its consequences to mother and child. The portion on treatment is concise, contains nothing new, but the collection of formulæ have been painstaking in their selection and cannot fail to be of value to anyone who has experience enough to enable him to select what he wants.

That section of the volume devoted to the consideration of Diseases of the skin is divided into two parts. Part I., Introduction, which includes the anatomy and physiology of the skin, general symptomatology, general etiology, general pathology, general diagnosis and classification. Part II., Special, is arranged into classes:

Class I., Inflammations; Class II., Hemorrhages; Class III., Hypertrophies; Class IV., Atrophies; Class V., New growths; Class VI., Neuroses; Class VII., Diseases of the appendages of the skin; Class VIII., Parasitic diseases.

It would be useless to here state the subdivision of each class, as it would entail too much space. However, the diseases most frequently met with are treated at the greatest length. The clinical descriptions are excellent; sound principles of treatment are laid down and numerous useful prescriptions are given. Among the numerous contributors the names of W. R. Robinson, W. A. Hardaway, J. A. Fordyce, A. Van Harlingen, G. T. Jackson and others of equal fame may be found.

On the whole, the volume contains 1,229 well-printed pages Its contents are wonderfully complete. The colored illustrations are, most of them, well executed, some of them exceptionally so, and the woodcuts are good. E. W.

THE NERVOUS SYSTEM AND ITS DISEASES: A Practical Treatise on Neurology, for the Use of Physicians and Students. By CHARLES K. MILLS, M. D., Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania; Clinical Professor of Neurology in the Woman's Medical College of Pennsylvania; Professor of Diseases of the Nervous System in the Philadelphia Polyclinic; Neurologist to the Philadelphia Hospital, etc. Royal octavo, pp. xxx.—1,056. With 459 illustrations. Philadelphia: J. B. Lippincott Company. 1898.

The author has planned a most elaborate and complete presentation of the nervous system and its diseases. The present volume is not only abreast of the times, but it actually leads in the advanced discussion of the recent additions to the anatomy and pathology of the nervous system.

The student who uses this work as his first on nervous diseases will have the advantage of not being required to unlearn the old nomenclature. Throughout the work the nomenclature and terminology advocated by Prof. Wilder, of Cornell, has been used. The adoption of the reforms by the author is of great significance and will do much toward making their use general in future text-books.

As Mills says, "The reforms advocated by this distinguished anatomist, especially the introduction of mononyms, are deserving of general adoption."

The first chapter of 124 pages is devoted to a general sketch of the nervous system, its tissues, development, anatomy, physiology, nomenclature and chemistry.

In this section the author dissents from the view that the sensory tract terminates in the cortical motor zone. He believes that the cortical motor and sensory areas are practically separate.

His discussion of the architecture and general physiology of the nervous system is very clear and must be thoroughly understood in order to follow him in his discussion of localisation.

He considers in Chapter II. general pathology, etiology, symptomatology—methods of investigation, electricity and general therapeutics. Under general therapeutics we find careful consideration of balneotherapy and the diseases in which various forms of baths are useful—massage, movement treatment, vibratory therapeutics, Weir Mitchell's rest cure with Schedall's suspension, hypnotism and local remedies. The uses of animal extracts of cerebrin, he says, "the subject may be considered unsettled with the weight of authority against it." Of medullin pancreatin, gastrin cardin, he says, "some of the results obtained are scarcely worthy of mention." Of testicular therapy he accepts the conclusions of Venturi and Frondo, that testicular remedies have given negative or, at best, only transitory results.

The chapter is made unusually valuable by the very full discussion of the uses of the more potent drugs and a statement of the author's experience with them. In the third chapter is presented diseases of the membranes, sinuses and veins of the brain, brain malformations and aberrations.

In the fourth chapter he considers encephalic histology and physiology in their relation to focal diseases. Here we find the latest and best study of cortical localisation. He does not force his own views, but gives fairly the opinions of those who differ from him. He is not so disputatious as Ferrier, but presents his case with just as much strength. This is a quality which carries great weight and adds pleasure to the reader's study.

In the fifth chapter is a study of the encephalic vessels and their diseases.

In the sixth we find a full discussion of aphasia and notice with interest the large cortical area which is now allotted to speech.

In the remaining chapters is a systematic consideration of the affections of the special senses and cranial nerves. This includes a special section on the cochlear and vestibular nerves and their diseases.

The entire volume is most satisfactory and bears the stamp of a master. The profession will be anxious for the second volume, which will consider the spinal cord and its diseases and the functional and diseases of peripheral nerves. The work of the publishers in illustration and letter-press is of the best. J. W. P.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Specially Prepared Articles on Treatment and Drugs. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M. D. (Univ. of Penna.), Philadelphia. Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania, etc.; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on Clinical Medicine in the Aberdeen Royal Infirmary, etc. Volume I. Eighth series. 1898. Octavo, pp. xii.—363. Philadelphia: J. B. Lippincott Co. 1898.

The lectures in this volume are classified under the following heads: Drugs and remedial agents, treatment, medicine, neurology, surgery, gynecology and obstetrics, ophthalmology, laryngology, rhinology and dermatology. Dr. Charles G. Stockton, of Buffalo, supplies a lecture on Weak heart, and gastrectasis from pyloric spasm. Other prominent lecturers contributing to this volume are Prof. Jaccoud, Byrom Bramwell, E. Fletcher Ingals, Joseph M. Mathews, Charles G. Cumston, A. Pinard, Paul F. Mundé, Henry C. Coe, William Oliver Moore and Samuel G. Dabney. It contains a few illustrations and is excellently printed on lines similar to its predecessors.

A LABORATORY TEXT-BOOK OF PATHOLOGY, for the Use of Students and Practitioners of Medicine. By HORACE J. WHITACRE, B. S., M. D., Demonstrator of Pathology in the Medical College of Ohio. 121 illustrations. Philadelphia: P. Blakiston, Son & Co. 1898.

One of the best laboratory guides for the student yet issued is the manual of Whitacre, which gives the essentials of pathology and leaves the generalities for the larger treatises. It deals with the various pathological conditions of the internal organs, inflammation, the degenerations, tumors and infective granulomata. The different conditions are illustrated by photomicrographs, which enable the student to see the tissue as it really is, and not as the author thinks he ought to see it. These photomicrographs are all well chosen, are truthful in their delineation and form the bulk of excellence of this work. They are well worth the price of the manual.

W. C. K.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA. Forty-fourth annual meeting, held at Morehead City, N. C., June 8, 9 and 10, 1897. R. D. JEWETT, M. D., Secretary, Wilmington, N. C.

This sterling society has again sent out an interesting volume of transactions. Besides the address of the president it contains the annual oration by Dr. Charles O'Hagan Laughinghouse, of Greenville, in which he gave a few hints in medico-social ethics. Then follow the reports of the committees and the papers read at the meeting, including the annual essay by Dr. J. B. Powers, of Wake Forest,

entitled Psycho-therapeutics. An obituary of Dr. James McIntosh Hays is accompanied with an excellent half-tone engraving of this distinguished physician whose death was noticed in the JOURNAL for June, 1897. The volume is an excellent record of an interesting meeting.

ATLAS AND ESSENTIALS OF PATHOLOGICAL ANATOMY. By PROFESSOR O. BOLLINGER, M. D. Volumes I. and II. Duodecimos, pp. viii.—246 and pp. x.—232. Illustrated. New York: William Wood & Co. 1898.

The study of pathologic anatomy can only be properly pursued in the laboratory, yet aids to its pursuit are necessary in the way of text-books. Illustrations of morbid processes are never very clear unless given in colors. The plates in this atlas are all made from actual specimens and the drawings are true to nature. The colors are in beautiful tints, and taken altogether it is one of the most helpful auxiliaries to the acquirement of definite knowledge in pathologic science. Every laboratory teacher and student should possess it.

THERAPEUTICS OF INFANCY AND CHILDHOOD. By A. JACOBI, M. D., Clinical Professor of the Diseases of Children in the College of Physicians and Surgeons, New York, etc. Crown octavo, pp. xvi.—629. Second edition. Philadelphia: J. B. Lippincott Company. 1898.

The first edition of this work was noticed so recently in the JOURNAL that an extended review is not necessary. The present edition has been thoroughly revised, giving the work a completeness which was lacking in the first. It was then one of the most excellent works of its kind ever issued, and the revision has only added to its excellence. The book is still a personal one, a fact which enhances its value in these days of unpersonal systems. M. J. F.

LEXIQUE-FORMULAIRE DES NOUVEAUTÉS MÉDICALES. Par LE PROFESSEUR PAUL LEFERT. One vol. in 18–18 de 336 pages, cartonné, 3 fr. Librairie J. B. Baillière et fils, 19 rue Hautefeuille (près du boulevard Saint-Germain), à Paris.

This is a convenient little volume which combines the dictionary and the index of treatment. It is, of course, alphabetically arranged; the terms used are defined; their therapeutic uses given, and in many instances detailed formulæ of their combinations are set forth. It is arranged by a practical physician and is a convenient book of reference for the every-day practitioner of medicine.

AIDS TO ASEPTIC TECHNIQUE. By A. D. WHITING, M. D., Assistant Surgeon to the German Hospital, Philadelphia. Duodecimo, pp. 157. Philadelphia: J. B. Lippincott Co. 1898.

The object of this book being to aid those whose duty it is to prepare materials for operations it is addressed more especially to nurses and assistants at the operating table. Nevertheless, it affords pleasant reading to the more experienced practitioner of medicine as well

as surgery. It does not aim to take the place of the completer treatise, but rather to reinforce the ready reference library. Every nurse should obtain it and consult it frequently.

SEXUAL NEURASTHENIA: Its Hygiene, Causes, Symptoms and Treatment, with a chapter on Diet for the Nervous. By GEORGE M. BEARD, A. M., M. D., formerly Lecturer on Nervous Diseases in the University of the City of New York; Fellow of the New York Academy of Medicine, etc., etc. Edited, with notes and additions, by A. D. Rockwell, A. M., M. D., formerly Professor of Electro-therapeutics in the New York Post-Graduate Medical School and Hospital, etc., etc. With formulas. Fifth edition. Octavo, pp. xii.—308. New York: E. B. Treat & Co. 1898.

To again notice this interesting work seems almost a species of supererogation. The previous four editions have been quickly exhausted and this, the fifth, has been revised with omissions, modifications and additions, so that it is practically an expression of the author's views as at present entertained on all the essential features of which it treats. It occupies a field in which Rockwell stands apparently unrivaled and in which he is accepted as unquestioned authority. He has successfully wrested the treatment of these disorders from the hands of empirics, for which he is entitled to receive the support and thanks of the profession of medicine.

PROCEEDINGS OF THE SEVENTH ANNUAL MEETING OF THE ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES, held at Columbus, Ohio, May 25, 26 and 27, 1897. Edited by JAMES E. PILCHER, M. D., Captain in the Medical Department of the United States Army; secretary and editor of the Association. Columbus, Ohio: Berlin Printing Co. 1897.

This handsome book is full of interesting material, the importance of which is greatly accentuated now that war with Spain is in actual operation. This association, through its meetings, scientific papers and discussions, has been the means of greatly improving the medical corps of the National guard in the several states. Brought as they have been through its influence into intimate association with regular officers of the army and navy of the United States, much has been learned of the medical and surgical care of troops in the field which will now become available should our forces invade Cuba, as seems probable.

This volume is well edited, beautifully printed and handsomely bound. It should form a part of the library of every military and naval surgeon.

TRANSACTIONS OF THE TEXAS STATE MEDICAL ASSOCIATION. Twenty-ninth Annual Session, held at Paris, Texas, April 27, 28, 29 and 30, 1897. H. A. WEST, M. D., Secretary, Galveston, Texas.

The transactions of the Texas state medical association, as published year by year, become an important part of the literature of medicine. The volume before us is no exception to the rule and it testifies to the most excellent condition of the medical profession in

the Lone Star State. The book is ably edited by Dr. West, whose labors for the improvement of professional standards are well known throughout the country.

BOOKS RECEIVED.

Accident and Injury. Their Relations to Diseases of the Nervous System. By Pearce Bailey, A. M., M. D., Attending Physician to the Department of Correction and to the Almshouse and Incurable Hospitals, New York, etc., etc. Octavo, pp. xii.—430. New York: D. Appleton & Co. 1898.

Public Health Reports (formerly Abstract of Sanitary Reports). Issued by the Supervising Surgeon-General, Marine Hospital Service. Volume XIII., Nos. 1–53. Washington: Government Printing Office. 1898.

A Manual of Hygiene and Sanitation. By Seneca Egbert, A. M., M. D., Professor of Hygiene in the Medico-Chirurgical College of Philadelphia. In one 12mo volume of 360 pp. with sixty-three engravings. Cloth, $2.25, net. Philadelphia and New York: Lea Brothers & Co. 1898.

Report of the Health Department of the City and County of San Francisco for the fiscal year ending June 30, 1897. Edmond Godchaux, Secretary, San Francisco. 1897.

A Manual of Instruction in the Principles of Prompt Aid to the Injured. Including a chapter on hygiene and the drill regulations for the hospital corps, U. S. A. By Alvah H. Doty, M. D., Health Officer of the Port of New York, etc. Duodecimo, pp. xvi.—302. New York: D. Appleton & Co. 1898.

Brief Essays on Orthopedic Surgery. By Newton M. Shaeffer, M. D., Surgeon-in-chief to the New York Orthopedic Dispensary and Hospital, etc. Duodecimo, pp. 81. New York: D. Appleton & Co. 1898.

Transactions of the Southern Surgical and Gynecological Society. Tenth Annual Meeting, held at St. Louis, Mo., November 9, 10 and 11, 1897. William E. B. Davis, M. D., Secretary. Published by the Association. 1898.

LITERARY NOTES.

The *New Hampshire Sanitary Journal* made its appearance during May, 1898. It is a quarterly magazine, published in the interest of healthful homes and communities, is the official organ of the New Hampshire board of health and of the New Hampshire association of boards of health. It is edited by Dr. Irving A. Watson and is published at Concord, New Hampshire. The first number contains 64 pages, is full of interesting material and is handsomely printed on antique paper. Its subscription price is $1.00 a year.

The *International Medical Magazine* has been published since January 1, 1898, under new editorial and business management. The *Magazine* has been considerably enlarged, is especially illustrated, several new and attractive departments have been added, and the

subscription price has been reduced to ($2.00) two dollars a year. Nevertheless, the magazine retains its high standard and is one of the best medical monthlies published.

SAJOUS'S Annual and Analytical Cyclopedia of Practical Medicine, a review of the first volume of which will be found in its appropriate place in the JOURNAL, will appear at the approximate rate of one volume each six months, the whole alphabet being thus covered in three years, and during this time a monthly supplement (The Monthly Cyclopedia), alphabetical from A to Z, will be brought out, so that a doctor can have a complete synopsis of the latest journal literature to reinforce his system of reference.

Subscriptions are taken for the entire series only, at $5.00 a volume, in cloth. This secures a large six-volume reference system with thirty-six monthly supplements during that period.

The volumes will be beautifully illustrated; each volume will be handsomely bound in two colors of cloth. The half Russia binding will be furnished at $6.00 a volume, if desired.

THE *Memphis Lancet* will, it is announced, begin publication on July 1st, 1898, as a monthly journal devoted to progressive medicine. It is the purpose of the editors to put it in the front rank of medical periodicals, and to that end they assert that they will spare neither time, pains nor money. It will be published on the first of each month, and will contain fifty-four pages of reading matter, including original articles, editorials, news and notes and abstracts from other publications, giving a full résumé of the progress of medical science. We wish the *Lancet* a full measure of success.

THE *Laryngoscope*, St. Louis, beginning with the July, 1898, issue (Vol. VI., No. 1,) proposes to publish a complete bibliography and abstract department containing a résumé of the entire field of otology, rhinology and laryngology, as gleaned from the pages of the medical journal press from every section of the world. The enterprise is commendable.

THE *National Medical Review*, beginning with its March issue, publishes a supplement called The Military Surgeon, which is under the charge of Colonel William H. Forwood, M. D., assistant surgeon-general United States army. The first article in the May issue is entitled

Field service, by George W. Adair, M. D., assistant surgeon U. S. army, and should be read by every medical officer of the National Guard now entering the United States service. Following this are several pages of well-selected material from home and foreign journals relating to military medicine and surgery.

THE *American Journal of Insanity*, one of the ablest and staunchest of medical magazines, has for the past year been published under the auspices of the American medico-psychological association with the following board of editors: Drs. Edward N. Brush, G. Alder Blumer and J. Montgomery Mosher, with Henry M. Hurd as editor-in-chief. Its place of publication has been changed to Baltimore, and is published by the Johns Hopkins Press.

THE Buffalo general hospital has issued its thirty-ninth annual report, which covers the year 1897. During the year 2,050 cases were treated, of which 806 were medical, 841 surgical, 294 gynecological, 83 obstetrical and 26 were ophthalmological patients. The number of deaths during the year was 213, and 702 ambulance calls were answered. The number of pupils graduated in the training school was 13. It is needful that the new building should be completed, as the demands upon the hospital are in excess of its capacity. Here is an opportunity for philanthropists.

BRIGHAM HALL, a hospital for the insane, located at Canandaigua, is one of the best private institutions in the country for patients afflicted with nervous and mental diseases. Its location is most healthful, the water supply ample and pure and its environment is charming. It is under the charge of Dr. D. R. Burrell, who is an accomplished alienist and an able administrator. The hospital has issued an interesting illustrated circular, in which it states that cases of neurasthenia and of the alcohol or drug habit, who are not insane, but are willing to conform to the regulations of the hospital and to the advice of the physicians, will be received on voluntarily signing a request for admission.

THE state board of health of Massachusetts has issued an elaborate report on Epidemic cerebro-spinal meningitis and its relation to other forms of meningitis. This is an illustrated book of 178 pages and is a credit to the board from a scientific standpoint, and a work in which neurologists will be interested.

ITEMS.

WHETHER or not the military and naval forces of the government at present under arms are to see much active service or participate in many pitched battles, it is probable that many minor casualties will occur and that the surgeons will be called upon to treat a considerable number of minor wounds, such as burns, abrasions, small cuts, and the like, for which it would seem as if the new local anesthetic, orthoform, should prove of peculiar service. It will be remembered that orthoform is a fine white powder, claimed to be entirely nonpoisonous and to possess the power of producing complete and continuous anesthesia when applied to denuded surfaces or whenever it can be brought in direct contact with sensitive nerve-ends. As the drug is also a distinct antiseptic it needs no sterilisation. It can be applied pure as a powder, or in 10 to 20 per cent. ointment with any desired base. Messrs. Victor Koechl & Co., 122 Hudson street, New York, the American agents, offer to send literature and samples to any medical officer requesting the same.

THE Mellier Drug Company, of St. Louis, has issued an engraving of the first meeting of the Medical society of London, which was held in 1773. The group is composed of the following-named: John Coakley Lettsom, president; William Saunders, Relph, Sir John McNamara Hayes, William Woodville, Edward Bancroft, James Ware, Thomas Bradley, James Sims, Edward Jenner, Robert Hooper, Edward Ford, Robert Blair, William Babington, John Haighton, Robert John Thornton, John Shadwell and John Aikin. This is the most interesting picture that has of late been sent out to the profession. A copy will be mailed to any physician applying for it by the proprietors of the tongaline preparations, the Mellier Drug Company, No. 2112 Locust street, St. Louis.

THE American agents, Messrs. Victor Koechl & Co., announce a reduction in the price of Dr. Knorr's antipyrin. In lots of 100 ounces or more it is offered at 70 cents an ounce; in lots of less than 100 ounces, at 80 cents an ounce.

MEDICAL excursion in June—(Denver to Salt Lake City)—The medical excursion in June will leave Denver for Salt Lake City—the Zion of the new world—on the last day of the meeting of the American medical association and the two successive days via the Rio Grande

Western railway in connection with the D. & R. G. and Colo. Mid. lines. The rate will be but $18 for the round trip, offering a trip of 1,500 miles through the Rocky and Wasatch mountains. No European trip of equal length can compare with it in grandeur or wealth of novel interest. Salt Lake City and vicinity is one grand sanitarium. The Great Salt Lake or Dead Sea of America with its magnificent bathing resort, the hot and warm springs, drives, parks, canyons and reserves are all located in or about the city. Send two cents to F. A. Wadleigh, Salt Lake City, for copy of pamphlet.

The American medical association announces railroad rates for the Denver meeting, June 7-10, 1898, as follows: The Western passenger association has granted a rate to Denver and return of one-half fare, plus $2.00, thirty-day limit, for business from Chicago, St. Louis and intermediate points. Tickets on sale June 2d, 4th and 5th east of the Missouri river: 5th and 6th west of the Missouri river. A round-trip rate of $20.00, thirty-day limit, from Ogden and Salt Lake, is also announced. Application for similar rates has been made to all other passenger associations and to railroads not controlled by them. Announcement of other rates and rules governing the sale of tickets will be made in the *Journal* of the Association as soon as decisions are received. This rate is as low as granted any convention this year. J. W. Graham, M. D., chairman committee of arrangements.

For the meeting of the American medical association, to be held at Denver, Col., in June, 1898, we take pleasure in announcing that the Missouri Pacific railway has arranged to run a special through train from St. Louis to Denver, to be known as the "Chutmuck Special," making the trip via Kansas City, Pueblo and Colorado Springs.

This will be one of the handsomest trains ever run in the west, consisting of compartment sleeping cars, dining car, buffet car, etc., affording special accommodations for the wives and families of yourself and friends. Physicians should remember this in making their arrangements. Address H. C. Townsend, general passenger and ticket agent, or B. H. Payne, assistant general passenger and ticket agent, St. Louis, Mo.

ADDITIONAL PERSONAL.

Dr. William House, of 1106 Main street, is caring for the practice of Dr. Eugene A. Smith during the latter's absence as major in the 65th regiment. Dr. House will continue Dr. Smith's usual office hours at 831 Ellicott street.

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Original Communications.

ANTITOXIC SERUMS.[1]

BY E. M. HOUGHTON, M. D.,
Lecturer on experimental pharmacology, Detroit College of Medicine.

LIFE is, indeed, a battle. In the whole realm of living matter since its beginning an ever-continuous war has been waged. The battle is fiercely raging all about us and the fight for supremacy will continue until life ceases to exist. Since we now know that all living organisms are made up of isolated cells, or aggregations of single cells, we may well observe the phenomenon of life as presented by the unicellular organisms and trace out the general relations of the various kinds of cells to one another, and then we shall have a clearer understanding of the methods of attack and defense as presented by the ordinary animals and man toward the single-cell microscopical plant, the disease-producing or pathogenic bacteria. When we realise that at least one-third of the human family die of diseases known to be of bacterial origin we can understand with what a relentless foe we have to contend. However, if germs are the greatest enemies of mankind they are also his greatest friends, since the transformation of organic substances into inorganic constituents, of which they are composed, is dependent upon the ceaseless energy of these lowest forms of life. Without them the world would be uninhabitable—a vast sepulcher filled with the unchanged dead. For ages many of the facts of immunity have been known and studied by the medical profession, but these facts and the therapeutic application of remedies were often fallacious. From the invention of the microscope dates the dawn of rational medicine. In the course of time bacteria were discovered. Now their life history has been studied

1. Read before the Alumni Association of the Medical Department of the University of Buffalo, April 26, 1898.

and their modes of attack partially uncovered; consequently we are now able in some instances to drive the enemy from his stronghold.

The morphology of different species of bacteria varies greatly. The pigmentary bacillus prodigiosus thrives well at ordinary temperature, while most of the pathogenic bacteria must be grown in an incubator. We are able to produce culture media for many of the disease-producing organisms, but some refuse any pabulum we can offer. Other germs, as the streptococcus pyogenes, when grown artificially fail to produce the specific disease, or produce only a modified form of it when injected into susceptible animals. Still others, as the diphtheria germ, may, by proper methods of cultivation, be kept virulent for years.

The products formed by bacteria vary greatly, depending upon the food supply and the conditions under which development takes place. Carbonic acid, alcohols and gases of the methane series are some of the intermediate products that may be formed during the disintegration of the carbohydrates by bacteria. Proteid substances are the origin of a still greater variety of combinations before being returned in the form of nitrites, acids and other inorganic substances to support vegetable life. These intermediate products of carbohydrate or proteid disintegration may be merely decomposition products, or they may be the result of synthetic processes of bacteria. Many of them are of the greatest practical importance to mankind and to the medical profession.

The ptomaines—that class of bacterial products that bear such a striking resemblance to the vegetable alkaloids—may or may not be poisonous. Breiger and others have isolated many of them in a pure state and determined their formulæ.

More poisonous are the proteid bodies, sometimes called toxalbumins, some of which behave chemically like albumins, others like globulins, while still others resemble ferments most closely. These belong to the same group of poisons as the deadly ricin from the castor-oil bean, similar bodies from other plants, and the poisons isolated from the venom of snakes.

The most deadly weapons of bacteria are not their ptomaines, or toxalbumins. They produce other substances, which fail to give the biuret test or to respond in a characteristic manner to the alkaloidal reagents, but which are many times more poisonous than either ptomaines or toxalbumins. For want of a better name these ultra-poisonons products are called toxins. They have not been isolated in a pure state, consequently we know neither their composition nor

the minimum lethal dose, but from the fact that a grain of impure tetanus toxin is sufficient to kill several hundred men we must conclude that the toxicity of these products is without a parallel in the whole realm of science.

In the production of antitoxic serums it is necessary first to obtain the specific bacterial products in solution for injection into the animals that are to be immunised. Owing to the fact that some bacteria, as the tubercle bacillus, bacillus typhi abdominalis and the like, contain in their enveloping membrane a wax-like material, which prevents the substances formed in the interior of the cell from being dissolved in the culture-medium in which it is grown, it has been found necessary (as shown by Koch, Buchner and others) to devise mechanical means for destroying this envelope, in order to obtain the specific products of the microörganism in solution. Other bacteria, as the diphtheria germ, do not have this impervious membrane, and their specific products readily pass into solution in the environing culture medium in which they are grown. This flask contained two weeks ago a straw-colored, sterile, transparent beef bouillon. It was planted with pure cultures of the Klebs-Löffler diphtheria germ, and placed in the incubator. The fluid has become turbid. This turbidity is mainly due to the countless millions of dead and living diphtheria cells. I have filtered a portion of the culture through this unglazed porcelain filter, which has meshes so fine that all foreign material not in solution is kept back. Yet the specific poisons of the germ are contained in the transparent filtrate which has passed through the filter and which has the exact appearance of the original bouillon.

It seems almost incredible, yet it is true, that a horse weighing over 1,200 pounds, which was under my care, died with all the symptoms of diphtheria paralysis about ten days after being injected with two minims of this innocent-looking fluid. When we remember that at least 98 per cent. of the two minims injected was nothing but water, and that a large proportion of the other possible 2 per cent. was composed of salts and peptone, we can form some conception of the potency of the products formed by the dreaded diphtheria germ. Another and smaller animal, which had been under treatment for over two years, standing in an adjoining stall, was given over ten thousand times the above quantity of the same poisonous fluid without showing any marked reaction to it.

The mass of facts already determined by the army of busy workers regarding natural and acquired immunity is so great, and the evi-

dence is so conflicting that it is wellnigh impossible to draw definite conclusions. I shall attempt to speak of a very few of the more important points that have been studied. Animal experiments have already shown that different species of bacteria react very differently to mineral and other poisons. Thus the bacillus of chicken cholera is killed by 1-25,000 mercuric chloride, while the pneumonia bacillus of Friedlander may survive after being exposed to 1-2,000 solution. Haffkin has shown that the aqueous humor of the rabbit's eye quickly kills the bacillus typhi abdominalis, but by mixing small and gradually increasing quantities of this fluid with the culture medium in which the germs are grown the organisms become so thoroughly immunised against its toxic action, that more luxuriant growth occurs on the mixed culture medium than upon that originally employed. Certain plasmodia can be gradually accustomed to the presence of such substances as sugar, arsenic and the like, which were at first fatal to them. It appears that the natural or acquired immunity of these lower forms of life is dependent upon some peculiar property or properties possessed by the individual cells. The question naturally suggests itself, What is the explanation of the immunity possessed or acquired by higher organisms? Why should the cow be very susceptible to tuberculosis, while the horse rarely has the disease? Why can the Indian snake-charmer be bitten by the cobra without harm, while to ordinary people such bites would mean certain death? Why should one man die from smallpox while another, equally exposed, is not attacked, and still a third has the disease, but after recovery will not contract the disease again? These and similar queries have been perplexing the minds of the profession and laymen since the dawn of reason. Our attempts to answer have often been worse than confessions of ignorance until experimental methods were applied to the knotty problems.

The exhaustion theory, as the hypothesis of Pasteur was called, almost as soon as announced was disputed by Chauveau, who believed that bacteria ceased to grow, and finally died in culture flasks, and that men and animals recovered from bacterial infection when the excretory products of the disease germs had accumulated in sufficient quantities to destroy the invading microbes in the same manner as higher plants and animals are destroyed by their own excretia. Immunity, it was explained, was due to the very slow elimination of these bacterial products from the organism of the subject. This theory was accepted by Koch to explain the curative results of tuberculin. Klebs and others endeavored to find similar

remedies for other of the infectious diseases after this method, but without success. Today we repudiate the explanation, although the facts hold true.

Sternberg, Metchnikoff and others have made many experiments which prove that certain of the white cells of the blood serve as police to prevent the entrance of microörganisms, and to destroy those that have already gained access to the animal body. Certain it is that the leucocytes do hasten to the point of infection and pick up many of the bacteria present, but these bacteria may have been first killed by other agencies. Metchnikoff has shown that the phagocytes may be educated, by means of the subcutaneous inoculation of their host with attenuated cultures, to great activity in apprehending the entrance of certain bacteria. But the theory of phagocytosis is only a partial explanation of the phenomenon. Much of the experimental work goes to show that other elements than the leucocytes defend the organism against disease. Fodor ten years ago proved that anthrax germs are destroyed by freshly drawn blood. Nuttall confirmed and extended Fodor's work, while Behring and Neissen found that the bactericidal properties of the blood of different animals vary greatly; thus the bacillus of typhoid fever was killed, while the streptococcus pyogenes was but slightly affected, by the freshly drawn blood of rabbits. Vaughan, McClintock and others have shown that the germicidal properties of blood probably depend upon nuclein which may come from the white cells of the blood. Many other facts of importance have been worked out, but no one has yet determined the chemical or physical properties of the extremely active substance contained in the blood of immune animals which are called antitoxin. Briefly, the method of conferring upon horses and obtaining the life-giving serum may be described as follows:

The greatest care should be exercised in selecting the horses that are to be immunised. Only young, healthy animals which have been carefully inspected by a competent veterinarian, tested with tuberculin and mallein and kept under observation for several days afterwards, should be accepted.

Many methods have been employed, at the suggestion of different investigators, for producing immunity in these animals. Behring and Roux both use practically the same method—the one employed generally at the present time. Small initial subcutaneous injections of the bouillon containing toxin are made, 1-10 c.c., diluted with sterile physiologic saline solution to 1 c.c., is quite sufficient for the first injection. The degree of reaction is very variable in different

horses. Some will show almost no local or general effects, while others in apparently as good condition are rapidly prostrated with even the smallest injections. The temperature may be five or even six degrees above normal and marked local swelling occur. In the writer's experience if the temperature rises more than 4.5 degrees the horse will surely die, either from the primary injection or subsequently if treated further, unless antitoxin is administered. This fact suggested to me the possibility of producing immunity in such animals by combating the marked toxic symptoms with injections of antitoxin, the value of which method has been fully confirmed by other investigators.

The great difference in reaction to the toxin on the part of different horses has been shown by Bolton to be probably due to the fact that the blood serum of some unimmunised horses contains antitoxic substances. Among other animals a similar variation in resistance to other poisons is observed. The horses that show the greatest reaction to the poison are the ones that produce the most potent serum. Indeed this vial contains serum which, as obtained directly from the blood of such an animal, possesses the remarkable potency of 2,000 units to the c.c., or 125 units to one drop. I shall have occasion to refer to this later.

The intravenous method of injecting the toxin has been employed quite extensively. General disturbance, contrary to what might be expected, is much slighter when the toxin is introduced directly into the circulation than when injected subcutaneously. Klein found that by beginning with a small injection of attenuated culture of diphtheria germs and gradually increasing the quantity and virulency of the germs at the subsequent injections, the animal is able to take large quantities of the most virulent cultures in three or four weeks' time. This method of producing immunity is quicker and less dangerous to the horses than the method of Behring, but it is impossible thereby to produce a very strong antitoxic serum even after long continued treatment. However, it may possess greater bactericidal properties than a serum obtained by injecting the toxins. This seems hardly probable since Wassermann has shown that if an animal be immunised with virulent cultures of bacillus pyocyaneus its blood will acquire strong bactericidal but weak antitoxic properties, while an animal immunised with the toxin instead of with the germs yielded a serum which possesses both germicidal and antitoxic properties in a marked degree. By all these methods strong immunity can be produced. It may be that a combination of methods will be found ultimately to

be more satisfactory than any one method alone. Horses, as human beings, have their own individual characteristics, that must be taken into consideration in order that the best results may be produced. Occasionally an animal will, while under treatment, show all the typical symptoms of post-diphtheric paralysis, even regurgitate its food. Such cases recover very slowly or may suddenly die of heart failure, as do many human patients. Exercise, sunshine, fresh air and careful attention to the food, in fact, the best hygienic conditions should prevail. If such attention is given, the horses may gain in flesh.

The amount of toxin and the length of treatment necessary to immunise animals so that they will produce antitoxins of a given strength vary within wide limits. Some horses will produce a strong antitoxin for a time and then, notwithstanding the fact that we can inject very large and increasing quantities of toxin, the serum will become much weaker; or, on the other hand, as noted by Behring, an animal may become more susceptible to the toxin after a time, but still yield a very strong serum.

After the horses have been treated for a considerable time and are able to resist large amounts of the toxins, test quantities of blood are drawn from the jugular vein, observing the most careful aseptic and antiseptic precautions, into sterilised flasks or tubes and placed into the refrigerator. Some hours later, from the contraction of the clot, the serum is squeezed out and appears at the top of the tube. This serum contains the antitoxin. At first there is a very thick buffy coat, but it soon largely goes into solution, the leucocytes presumably furnishing a considerable portion of the protecting substance. This serum is drawn from the flasks or tubes with a sterilised siphon into a sterilised container, some preservative, trikresol, camphor, carbolic acid and the like, added, allowed to stand some time and is then passed through sterilised filters into sterilised containers. All the work of handling the serum should be done in a sterilised room by a person skilled in the technique of asepsis.

The therapeutic value of the serum must now be determined before it is finally filled into suitable containers for marketing. Several methods for standardising the serum have been proposed, but that of Behring and Ehrlich has been most generally accepted in this country, which is substantially as follows:

Half-grown guinea-pigs are the animals employed. Ten times the fatal dose of diphtheria toxin is mixed with variable quantities of the serum containing the antitoxin, then injected subcutaneously into

the animals. To illustrate: Suppose we find that 5 milligrammes of a given toxin is the fatal dose for a half-grown guinea-pig (250 to 300 gms.); in testing, 50 milligrammes of the toxin are measured out, mixed with, say, .05 1-20 milligramme of the serum containing the antitoxin and injected into pig No. 1. Pig No. 2 receives a like amount of the toxin mixed with .04 1-25 milligrammes of the serum. After a few days we find that pig No. 1 is well and healthy; in fact, has never been sick, while pig No. 2 died in a short time. We would say that 1 milligramme of the serum, 1-20,000 c.c., or .00005, is sufficient to protect a guinea-pig against 50 milligrammes of toxin and that each cubic centimeter of the serum contains 2,000 antitoxic units—an antitoxic unit being ten times the quantity of serum necessary to protect a medium-sized pig against ten times the fatal dose of diphtheria toxin. The serum in this bottle, to which I have already called your attention, showed a strength of 2,000 units. This means that we could inject into each of 200,000 guinea-pigs a fatal dose of this diphtheria poison, mixed with 1 c.c. of sterile saline solution taken from a cask holding about fifty gallons, into which had been mixed 1 c c., or 15 drops of this serum. Instead of having several carloads of dead animals, as would have been the result had no serum been mixed with the toxin, the pigs would nearly or quite all remain well and happy. It seems indeed wellnigh a miracle that specific medicine should have arrived at such a stage of perfection. This serum is about twenty times as strong as those on the market three years ago.

The assaying of antitoxin is very difficult, owing to the fact that a toxin which has been kept for some time loses some of its killing properties, but will still neutralise approximately as much antitoxin as when fresh. Indeed, recently two very experienced bacteriologists, to whom I had given each a sample of serum from the same bottle for assay, reported that the serum contained 250 and 700 units respectively.

Finally, the completed and tested antitoxin is filled into sterilised containers and is ready for distribution. Some firms prefer to put up several grades of serum, using containers holding from 1 to 20 c.c. of fluid. Others believe it is better to keep the average dose as small as possible and list the number of units, irrespective of the amount of fluid. On the table will be found some of the various containers, unlabled.

The question is often asked, How long will serum keep? If properly prepared, it should keep indefinitely, in the sense of putrefying;

but undoubtedly like other complex albuminous bodies, it begins to deteriorate or lose strength as soon as prepared. The greater the concentration, other conditions being the same, the more rapid the loss of antitoxic strength. Manufacturers generally add sufficient excess of serum so that the package will contain the number of units claimed on the label at the end of six months.

The following paragraphs in quotations are taken from a recent paper read by the author before the Michigan Academy of Science, *Journal of American Medical Association*, April 16, 1898:

Anti-venomous Serum.—Sewall (1887) succeeded in immunising pigeons against rattlesnake poison by administering gradually increasing quantities of the venom.

Fraser (1895) found, from very extended experiments with venom of the cobra, rattlesnake and many other poisonous serpents, that animals immunised against one venom were immunised against the other venoms also; that neither local nor general reaction follow inoculation with many times the fatal dose. Calmette and his coworkers in the Pasteur institute confirmed Fraser's work and have added many new facts bearing on the question. The protection of man from the bites of serpents, by artificial treatment with their poison, has been known and practiced for ages by the snake charmers of India. How well they have kept their secrets need not be told. The importance of this work can be appreciated from the fact that reports show that every year over 20,000 people die in India alone from the bites of snakes.

Abrin and Ricin Antitoxin.—Ehrlich succeeded (1891) in immunising and obtained a strong antitoxin by feeding larger and larger doses of the poisons ricin (from the castor bean) and abrin (jequirity bean). These antitoxins are specific in the true sense, since the one antitoxin does not protect an animal from the poisonous effects of the other. These results are of great importance from a scientific point of view, but of little practical importance to the physician.

Antitetanic Serum (lockjaw).—Kitasato (1889) showed that tetanus was due to a special germ, which, if injected into susceptible animals, produced typical symptoms of tetanus; this germ could be obtained from the body of a person dying of the disease. Shortly afterward he succeeded in immunising rabbits, whose blood serum was found to contain antitoxic substances. These results were confirmed by Tizzoni and Cattani in 1891. Behring and others, in 1892, detailed a method for immunising horses and obtaining their serum, which was used experimentally on man. The same year Brieger and Ehrlich immunised goats and found that the protecting substance was present, not only in the blood of the animal, but also in its milk. Later he obtained the antitoxin in an impure form as a dry powder from the milk. Of the greatest importance to the physician was the demonstration that it requires thousands of times as much antitoxin to cure an animal, after the symptoms have developed, as it does to prevent the development of the disease by giving antitoxin soon after the animal is infected; hence the necessity of prophylactic injections in cases of suspicious wounds. This serum is dispensed as a fluid or in a dry form.

Antituberele Serum.—This serum is prepared in the usual way from the blood of horses that have been immunised against attenuated

cultures of the tubercle germ or their poisonous product—old tuberculin. Considerable claims for this serum as a curative agent have been made. About a year ago Koch devised a mechanical process of breaking the wax-like enveloping membrane of the tubercle bacilli and obtaining the contained constituents, which when properly prepared he called tuberculin T. R. Buchner about the same time originated a similar method of extraction. Recently antitubercle serums have been placed on the market which were obtained from the blood of animals immunised against this material, but the results obtained give little promise of success.

Antistreptococcic Serum.—It is now generally believed that erysipelas, puerperal fever and many septicemias are due to streptococci of the same or closely related species, and that these germs often attack the weakened tissues and complicate such diseases as scarlatina, diphtheria tuberculosis and the like. It was early perceived that a serum efficacious against these germs, or their toxins, would have a wide field of usefulness. Marmorek first succeeded in producing such a serum, which is now prepared in this country and is being quite extensively employed. While we cannot yet come to a positive decision regarding its merits, the results following its administration in cases of puerperal fever, erysipelas, peritonitis and other forms of septic poisoning are, indeed, very encouraging.

Antityphoid, antibubonic, antisyphilitic, antirabic and other serums have been prepared. I believe we should regard all the antitoxins on the market at the present time, with the exception of antidiphtheritic serum, and possibly antistreptococcic serum, as experimental remedies which may or may not produce the results desired, but fortunately they can be employed with other therapeutic agents and they do no harm at most.

We find, briefly, that immunity can be conferred against a great variety of substances of animal, vegetable and bacterial origin. This immunity may be produced by feeding the poison, or by injecting it subcutaneously or intravenously; it can be taken from one animal and administered to another to aid the tissues in their efforts to prevent the entrance of disease organisms, or to destroy such organisms after they have gained access to the citadel of life. The immunising substance is found to be present in varying quantities in the different fluids and organs of the animal body, but at present we are unable to say in which this protecting substance is formed. Much of the recent work shows that the white corpuscles have a great deal to do with its production.

The great success of serum therapy in the treatment of diphtheria justifies the conclusion that rational medicine may now justly claim to be one of the most progressive of the sciences.

THE DIAGNOSIS OF PYOTHORAX.[1]

By EUGENE A. SMITH, M. D., Buffalo, N. Y.,
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IN THE course of most diseases there is a time when the casual observer can hazard a close guess as to their nature and a superficial clinical examination is certain to make the diagnosis. The obscurity to the nature of a disease in its early stages lies in the mature development of its characteristic group of symptoms, while later in the case it is due to the additional features which are caused by the development of complications. In cases of pyothorax which are fairly established and later, if complications are not present, the diagnosis is not difficult. But early in this disease and later in some of its more unusual forms and in the presence of complications the diagnosis is far from easy.

Judging from my experience, most cases of pyothorax which reach the surgeon for operation do so when they have progressed much nearer extreme danger or impending death undiagnosticated than should be necessary. Quite often the signs and symptoms upon which to base a diagnosis are ready for the clinician many hours or days before they are detected. Such delay cannot fail to influence the patient's chances most unfavorably. The operative treatment of empyema results so favorably when the diagnosis is made early and prompt thoracotomy is performed that the urgency of an early recognition of the condition is to be emphasised, more especially when the deplorable results of the old aspiration methods of treatment obtained no later than fifteen or twenty years ago, are contrasted with the brilliant results of thoracotomy as performed today.

In children, especially, delay in the diagnosis of pyothorax most often occurs. The struggles and cries of the child during physical exploration, the tendency to explain a slow convalescence in a case of pneumonia or pleuro-pneumonia in some other way than as due to pus in the pleural cavity, and the hesitancy to interpret the physical signs as indicating the need of exploratory needle puncture, seem to be the factors delaying the determination of the diagnosis.

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1. Read before the Buffalo Academy of Medicine, January 4, 1898.

In a case seen with the attending physician in June, 1896, a girl of seven had been ill eight weeks with pneumonia and a supposed relapse. I found a pyothorax actually pouting or ready to burst, in the fifth intercostal space, just outside the nipple line. An incision here through the skin was followed by a rush of pus. Resecting an inch of the eighth rib in the posterior axillary line, against the advice of a bystander who thought the child could not survive the operation, she made a good recovery.

The cause of the reprehensible delay in diagnosis in adults suffering from empyema lies in the timidity which prevents an exploratory needle puncture when the physical signs point to fluid in the chest, unless, indeed, the physical signs have been entirely misinterpreted and some other intra- or extrathoracic condition diagnosticated. In July, 1896, I saw a patient who was treated several weeks for abscess of the liver until the exploring needle finally demonstrated pus in the pleural sac at the base of the right chest posteriorly. Signs indicating fluid were present over a small area at the base of the lung and were taken to mean an enlarged liver pushed up into the thorax. Early attempts to find pus with the exploring needle in this region failed because the needle was entered too deeply in the search for the pus of an hepatic abscess. Thoracotomy opened an encapsulated empyema, the floor of which was the diaphragm and the roof the base of the right lung.

In another case, seen in June, 1895, a patient upon whom I made a thoracotomy finding right-sided empyema with the lung compressed into a small space in the region of the root of the lung, had been treated since the preceding April for consolidation of the lung due to tuberculosis. Here the hectic fever and general septic condition and absence of emaciation should have been found incommensurate with the progress of the supposed tubercular process long before, even though the typical physical signs of pleuritic fluid which were present had been so misconstrued.

When the physical signs of fluid in the pleural cavity can be found there is no pathognomonic sign or symptom of pyothorax outside of pus drawn by the aspirating syringe and there is no other way of distinguishing between a serous and purulent exudate. Chills, fever, sweatings, progressive emaciation and anemia are conditions which excite suspicion and point to the probability of pus, but they may be due to disease of tubercular origin or to septic processes elsewhere in the thorax or in the body.

The diagnosis of pyothorax, therefore, embraces the physical

signs of fluid in the pleural sac plus the pus which is drawn into the barrel of the exploring aspirating syringe. It may further be said that this statement holds true when the condition of the empyema is lateral, bilateral, sacculated or encapsulated, diaphragmatic or interlobar.

The diagnosis of fluid in the thorax depends upon the signs obtained by the physical examination. While these signs are distinctive, a close study at times is necessary to exclude consolidation of the lung, interthoracic new growths and thickened pleural surfaces, due to former inflammatory conditions.

Inspection of the bared chest may reveal lack of the natural movements of the affected side in breathing, with fulness of the intercostal spaces and bulging during the inspiratory effort. Increased frequency of breathing, with exaggeration of the movements of the sound side, are usually present. The apex impulse of the heart may be displaced especially when the fluid is on the left side. In old cases there occurs curving of the spine with the concavity toward the affected side.

On palpation vocal fremitus is absent over the fluid, or at least is diminished as compared with the sound side, or with the affected side over the compressed lung. Vocal fremitus may be present in the presence of pyothorax when thick pleuritic adhesions communicate vibrations, but under these circumstances it is localised with diminished or absent vocal fremitus surrounding the spot where the adhesions occur.

Auscultation reveals absence of respiratory murmur, except in the presence of a thin layer of fluid. Bronchial or tubular breathing may be heard, transmitted from the distant compressed lung, and inflammatory conditions in such lung tissue will allow of the transmission of râles. Vocal resonance is diminished, but distant bronchophony can be heard when the patient speaks loudly. In children the pronounced and unusual transmission of voice sounds is explained by Dewitt Sherman, of this city, as due to vibration readily conducted along bronchial tubes, consolidated compressed lung and from the thickened visceral to the thickened parietal pleural surfaces. Egophony may be heard over collections of fluid near the lower angle of the scapula. Friction sounds of roughened pleural surfaces occur in the presence of adhesions and even over large collections of fluid may cause the superficial examiner to overlook hydro- or pyothorax.

Percussion produces flatness and resistance to the finger over fluid. Dulness occurs over consolidated lung and thickened pleural

surfaces and intrathoracic new growths. Where lobar pneumonia is present, dulness, almost amounting to flatness, is obtained. Increased vocal fremitus distinguishes the case from hydro- and pyothorax. The pathognomonic sign of fluid is a change in the level of flatness on percussion with a change in the position of the patient's body.

When now the physical signs indicate pleuritic effusion the various factors of etiology and history may play their part in determining pyothorax. The history will aid in those cases in which the onset and early progress of the disease present typical signs of pleurisy. There is, of course, no doubt of the diagnosis when the history of perforation of the chest by bullet, knife or other agents can be obtained, or when caries or necrosis of the spine or rib can be shown as cause of septic pleurisy. The history is not so helpful when, following a pneumonia or a pleuro-pneumonia, a subacute pleurisy with effusion develops insidiously. Following or coëxisting with pneumonia, rheumatism, nephritis, the exanthemata, typhoid fever and pyemic conditions, pleurisy is known to develop and a resulting pyothorax may be much obscured. In December, 1897, I was called to the Deaconess's Home to operate in haste on an emergency case of empyema. I resected a portion of rib, evacuating a large pulmonic abscess, which the physician in attendance on the patient had considered an empyema. She was coughing constantly and spitting a most offensive fetid pus and was intensely septicemic. Air passed freely out of the opening in the thoracic wall from the lung. She lived a few days and was found to have pus in large quantities in the urine. Her history of trouble dated back to September, 1897, when she had her ovaries removed at the Buffalo general hospital. Both contained pus. She did well and left the hospital in two weeks. But within two weeks more she developed a lung trouble which was diagnosticated as pleurisy and she steadily did badly from that time. In another case, seen in June, 1897, at the Deaconess's Home, a pulmonary abscess was diagnosticated following a pneumonia, but thoracotomy revealed a sacculated pyothorax. When the history points to tuberculosis and the tubercle bacillus is discovered in the sputum, a close study of symptoms and signs may be necessary to distinguish between pyothorax and pulmonary abscess or tubercular consolidation of the lung.

Cough, fever and pain are variable quantities in empyema. In a case of pyopneumothorax, seen in December, 1897, cough was present early in the disease, grew less until it nearly ceased and

returned with copious expectoration of pus when the empyema opened into a bronchial tube when I resected a rib for this patient. Her temperature was subnormal and had been so for some time. Pain was not present after the early acute process had subsided. Pulse and respiration steadily increased. Fever is usually of the hectic type with evening perspiration more or less profuse.

On several occasions physicians have assured me that patients in whom pyothorax was suspected were not having fever. Finding that their daily visit was made in the morning I suggested leaving a thermometer, instructing some one in the family how to take the temperature. The afternoon and evening temperatures were found ranging between 99° and 102° in several of these cases. Anemia and emaciation become more marked as the case progresses. Chills and sweatings develop as the condition grows more septic and the patient sinks into a condition of septicemia or pyemia. In all uncertain cases the brief delay involved in making a blood count is advised. Leucocytes, if present, add strongly to the signs and symptoms of pyothorax already given.

When now the diagnosis of fluid is certain or even if suspected in doubtful cases, and some or all of the variable septic features of pyothorax are present, the use of the exploring needle must be urged to determine positively the presence and also the nature of the fluid. As to the use of the aspirating syringe for thoracic explorations I feel it can be pronounced a safe measure and it should be oftener employed. There need be no fear of infecting serous or hemorrhagic pleuritic exudate when the needle is inserted with proper precautions. Infection develops from bacteria within the circulation or the respiratory tract by their migration from blood-vessels, bronchial tubes or air vesicles.

As to the procedure to be followed in aspirating the chest I pursue the following course: Sterilise the syringe, which must be in perfect working order, with a needle of the size of a small probe. Thick pus cannot be drawn through too small a needle. Clean the walls of the chest thoroughly by scrubbing with soap and water, then wash off the thoracic wall with corrosive sublimate, 1-1000 solution. Have the patient's arm raised, insert the needle in the seventh or eighth intercostal space in the line of the posterior axillary fold, close to the upper edge of the rib, to avoid the intercostal artery on the lower border of the rib above. To produce local anesthesia, a square inch of the skin where the puncture is to be made should be frozen with chloride of ethyl. Introducing the needle one or two inches, depending upon

the thickness of the thoracic wall, the instrument should be steadied and suction made. Withdrawal is effected by a quick movement, and the end of a towel, wet in 1-1000 solution of corrosive sublimate, should be placed over the puncture until an antiseptic compress can be applied and secured by a strip of adhesive plaster. To place a strip of adhesive plaster immediately over the opening is not surgically clean.

If the needle does not enter the pleuritic abscess, or if it be pushed beyond it, or if it enters dense adhesions or extremely thick pleural surfaces, pus may be present and the needle fail to find it. Extremely thick pus may fail to enter the needle if the syringe is not entirely trustworthy, but in expelling the air with the point of the needle held in the palm of the hand a minute drop of pus may be obtained which is sufficient evidence of the presence of pyothorax to justify operation.

The dangers attending exploratory needle puncture of the thorax are three: A serous or hemorrhagic exudate may be infected by an unclean needle. The lung may be lacerated by too deep a puncture and lateral movements of the needle, causing pneumothorax or empyema. Lastly, an improper puncture may injure the intercostal artery, causing hemorrhage.

In conclusion, it may be affirmatively argued that a paper on this subject at this time is opportune. In the changing damp and cold weather of winter and spring, especially in the coming months of March and April, the prevalence of pulmonary and bronchial affections predispose to the development of pyothorax. It behooves the physician, therefore, to be on his guard to detect, as early as possible, the condition of empyema, in order that the benefits of early surgical evacuation of the pleuritic abscess may be obtained.

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THE USES OF THE STOMACH TUBE IN THE PRACTICE OF GENERAL MEDICINE.[1]

By J. A. LICHTY, M. Ph., M. D., Clifton Springs, N. Y.

MUCH valuable information has been gained since Kussmaul and Leube first used the stomach tube methodically in the diagnosis and treatment of diseases of the stomach. But by most men this information has been looked upon as being only for the specialist in diseases of the stomach and of little practical value

1. Read at the thirtieth annual meeting of the Medical Association of Central New York, held at Buffalo, October 19, 1897.

to one practising general medicine. The reasons for this are various:

(1) Special instruments and reagents must be employed and their proper use requires the knowledge of a certain technique. (2) Physicians in general practice feel that they cannot spare the time for "such outside work." (3) There is a prevailing opinion that the use of the stomach tube involves a procedure which, to say the least, is very disagreeable, not only to the patient but even to the doctor, and also that its use is accompanied by some degree of danger. (4) Many are of the opinion that the data obtained are of an uncertain nature and cannot be relied upon.

It is the purpose of this communication to show that these objections are, in the main, without foundation; that the successful use of the stomach tube is within the range of one practising general medicine and that neglect of its use is depriving both physician and patient of much that is helpful.

The instruments needed are very simple: a rubber tube, 75 c.m. long and 1¼ c.m. in diameter, having two large fenestræ at the stomach end, and a glass tube, 5 c.m. long at the mouth end, to which are again attached about 6 c.m. of rubber tubing; an ordinary Politzer's bag for aspiration and a rubber bulb with valve for inflation. With this simple outfit, a test meal can be taken, the stomach can be washed out and it can be inflated for diagnostic purposes.

It requires a little practice to pass a stomach tube easily and with the least discomfort to the patient. Before proceeding with the operation it is well to explain to the patient what you expect him to do, telling him to swallow when the tube touches the throat, to bite upon the tube when he feels as though he must vomit, to breathe deeply if he feels that he is suffocated and to bear down, as at stool, when told to do so. Biting upon the tube tends to overcome nausea and prevents the patient from ejecting the tube; deep breathing assures the patient that he is not being suffocated and the voluntary effort of bearing down is called into service when the tube is inserted about 55 c.m. to aid in expressing the contents.

I prefer a Politzer's bag to aspirate the stomach, having been impressed with its simplicity and convenience while a student at Professor Ewald's polyclinic at the Augusta hospital, Berlin. This, with the aid of the patient's expulsive efforts, is sufficient to empty the stomach. No lubricant is needed for the stomach tube. It is distasteful to the patient and the saliva moistens the tube sufficient to cause

it to slip down easily. The instruments should afterward be washed in hot water containing a small amount of lysol.

The purpose of this communication does not permit me here to pass in review and criticise in detail the different methods of chemical examination of gastric juice. Text-books on diseases of the stomach or on physical diagnosis give explicit directions on the chemical analysis.

For ordinary and practical purposes the apparatus required is no more elaborate than for the analysis of urine. The qualities to be determined and the respective reagents employed are in brief as follows:

1. Reaction is determined by means of ordinary litmus paper.

2. Free acids, Congo-red paper.

3. Free HCl, Gunsberg's phloroglucin-vanillin solution.[1] These three tests are easily made and are of prime importance.

4. The total acidity is determined by trituration with a deci-normal solution of NaHO, using phenol-phthalein as an indicator.

5. *Lactic Acid* is detected with Uffelman's reagent.[2]

6. *Pepsin* can be safely assumed to be present if free HCl is found, or a definite amount of egg-albumin can be added to a definite amount of filtered contents and digestion observed at body temperature. This test will give a fair idea of the digesting power of the gastric juice.

7. The degree of starch digestion is noted in the microscopical examination of the residue of the stomach contents, and by Lugol's test of the filtrate.

These tests, when one is once thoroughly acquainted with them, can be made very readily and will furnish an invaluable amount of information. It will not be denied that it requires some time to enter into such detail in diagnosticating disease of the stomach, but the accurate knowledge gained compensates for the time expended.

In answer to the objection to the stomach tube on account of its being disagreeable and difficult for the patient to swallow, I need only give my experience with patients. Those who need it will submit to the stomach tube without any objection or protest. Among a hundred consecutive patients during the past eighteen months, to whom I proposed using it, not one objected, and in only one case was I unable to introduce it. The cause of this failure was an existing pharyngitis which really made the operation painful. This list of a hundred patients does not include dispensary or free patients in a charity hospital, but private patients from the well-to-do and intelligent classes. With none have I noticed any alarming symptoms due to

the passage of the tube during or after the operation. Within the limits prescribed by text-books there is absolutely no danger.

Having shown that the use of the stomach-tube need not be confined to the specialist alone, and that it has, therefore, a proper place among the other means used for diagnostic purposes in general medicine, the questions arise, what information is obtained from its use, what is its relative importance, and to what extent can it be relied upon in the diagnosis and treatment of diseases of the stomach?

Sidney Martin[3] says that "It is evident that the examination of the contents of the stomach during digestion is of great service in the diagnosis and treatment of disordered digestion."

Mathieu[4] says, "At the present day it is, indeed, impossible to understand the nature of or to diagnosticate dyspepsia and its clinical varieties without a practical knowledge of the new methods of examination."

Classifying, in the broadest sense, diseases of the stomach as functional and organic, what first is the information gained by the use of the stomach-tube in some of the functional diseases?

"In hyperchlorhydria, the diagnosis can be made with certainty only after repeated examination of the gastric juice."[5] It is very important to distinguish between hyperchlorhydria and other conditions of the stomach in which there is hyperacidity, for the treatment of hyperchlorhydria is entirely different from the treatment for the hyperacidity of gastric fermentation. Several times when I hoped to avoid the use of the stomach tube it revealed to me later, after unsuccessful treatment, that I was treating one for the other and vice versa.

In motor insufficiency of the stomach, methods of diagnosis without the tube have been employed, but none is so satisfactory as lavage of the stomach in the morning when the patient has fasted for twelve hours after a supper of mixed food.

In nervous dyspepsia, while writers agree that the stomach contents are normal, yet I have found here a use for the stomach tube, which to me is invaluable. It is very easy to say to a patient that his symptoms are all nervous, that strict dieting is unnecessary, but it is often a difficult matter to get him to follow out your directions long enough to accomplish any results. In treating diseases of the stomach, more than in other diseases, it is necessary to have the coöperation of the patient, and this, not only for a day, but usually for an extended time, even after the patient has passed out of your immediate care. You can secure such coöperation almost invariably

by proving to your patient beyond a doubt that the digestive disturbance is of a nervous nature, and here nothing is so convincing as the examination of the stomach contents. My experience warrants me in saying that if this method were adopted by physicians generally it would not only aid in the treatment of this condition, but it would also be found that the frequency of nervous dyspepsia is not nearly as great as is usually supposed.

In organic diseases of the stomach the tube affords us important information. Unfortunately, this information has often been misconstrued, and has given rise to apparent contradictions. In 1879, Van den Velden[6] first stated that free HCl is always absent in gastric cancer. Cohn and Von Mehring[7] soon proved this to be too sweeping a statement. Ten years later, Ewald[8] declared that free HCl is absent only in the large majority of cases of gastric cancer. In 1893, Boas,[9] contrary to the usual opinion that lactic acid is present in normal digestion, asserted that it is always absent, and absent also in all affections of the stomach, except carcinoma. To him the presence or absence of free HCl in the gastric contents was of little importance in the diagnosis of gastric cancer. Also in 1895, Friedenwald,[10] in an original article on the quantitative estimation of the rennet-zymogen, attempted to show its diagnostic value in gastric cancer.

In reviewing the reported cases upon which these writers base their various opinions, I was impressed with the one prominent fact, that in a great majority of gastric cancers, free HCl is absent and that in the remaining few it is much diminished. In view of this fact, I have found myself relying very much upon the examination of the gastric contents in making a diagnosis of, or in excluding, cancer of the stomach.

In ulcer of the stomach the nature of the disease naturally forbids the use of the stomach tube.

In the diagnosis of chronic gastritis, the stomach tube is of incalculable value. Einhorn[11] in the diagnosis of this disease mentions the examination of the stomach contents as though it was as natural to resort to such a procedure as to examine the urine in suspected disease of the kidneys.

The stomach tube is necessary to determine the exact size and position of the stomach. The method of distention with bicarbonate of soda and tartaric acid is not satisfactory, since the amount of gas relative to the size of the abnormal stomach cannot be regulated and it is also sometimes a dangerous procedure. The succus-

sion splash, described by Bouchard, and recently so elaborately applied by Dr. Boardman Reed,[12] is not always to be relied upon, while the inflation of the stomach through the tube with a rubber bulb is easily accomplished. I practice the succussion splash in all of my cases, but several times the stomach-tube has shown me that I had been led astray by the splash of a distended transverse colon.

Comparatively little is yet known of intestinal indigestion, evidently on account of the difficulty of examining the process of digestion in the bowels. Herter and Smith,[13] in their exhaustive work upon the relation of the preformed sulphates and indican to intestinal indigestion, have opened up a large field for investigation, but their methods are as yet too complicated to be made practical for clinical purposes. I have found that a knowledge of the exact condition of gastric digestion frequently aids me in the diagnosis of intestinal indigestion. If there is gastric hyperacidity, and the excessively acid chyme emptying into the bowel neutralises the alkalinity necessary for proper starch digestion, an intestinal indigestion will arise.

The uses of the stomach-tube in toxic conditions need not be mentioned here. For lavage it must sometimes be resorted to and in certain conditions, such as pyloric obstruction with dilatation, will give relief when all other means fail. It has been objected to because patients are prone to get into the habit of washing out their stomachs upon the least discomfort. Judicious care on the part of the physician will save the patient from such a habit.

In a recent lecture upon the relation of the diseases of the stomach to other diseases, Prof. Ewald denied that he was a specialist on diseases of the stomach,[14] but at the same time he declared that the definite knowledge of the diseases of the stomach now at the physician's command, makes it obligatory upon him to avail himself of this knowledge to employ the methods for obtaining it and to use it for the good of his patients. It is in behalf of such an opinion that I have tried to indicate the practical use of the stomach tube in general medicine.

ADDENDA.

1 For a careful comparison of the different methods for estimating free HCl in gastric contents see an exhaustive article by Dr. David Linn Edsall, Univ. Med. Mag., September, 1897.

2. Dr. John P. Arnold has published a new and simple test for lactic acid in gastric contents and a quick method of estimating approximately the quantity present. Jour. Am. Med. Ass., August 21, 1897.

3. Sydney Martin, Diseases of the Stomach, p. 121.

4 Mathieu, Diseases of the Stomach and Intestines, p. 1.

5. Einhorn, Diseases of the Stomach, p. 294.

6. Deutsches Arch. f. Klin. Med., Bd. 23, p. 369.
7. Berlin Klinische Wochenschrift.
8. Ewald, Krankheiten des Magens, p. 355.
9. Münchener Med. Wochenschrift, October 24, 1893.
10. Med. News, June 22, 1895.
11. Einhorn, Diseases of the Stomach, p. 170.
12. Med. News, January 18, 1896.
13. New York Med. Jour., June and July, 1895.
14. Ewald, Unpublished Lecture.

DISCUSSION.

Dr. BENEDICT, of Buffalo: I want to hurriedly endorse one thing the doctor has said with a proviso. He has said that the stomach tube should not be limited to the use of the specialist. If the doctor uses the word specialist in the business, commercial sense, that is perfectly correct; but if he means to imply that every man who once a year or once in two years is going to try to pass the stomach tube and examine the stomach contents, or ought to do it, I think that is a mistake. I recall two cases in which I was strongly tempted to use the stomach tube for diagnostic purposes. In one of them the patient died suddenly from hemorrhage at the very time appointed for examination. It was simply the matter of an urgency call on the part of the physician with whom I was to see the case in consultation that we did not pass the tube at that time and have a sudden death on our hands. And another just such case, except there was not the theatrical interruption. It seems to me, without reference to the specialism in a business sense, if a man is prepared to do thorough work with the use of the tube and do a good deal of it, let him by all means use the tube whether he calls himself a specialist or not. If he is simply going to use the tube once or twice a year, he better not use it at all, because it is a risky thing to use in aneurism and in cases of pregnancy where there is a chance of abortion, and in any cases of that sort where we have got to avoid a chance for spasm. Again, a man who uses a tube must make up his mind to two or three things at the start. In the first place, he cannot let that tube take the place of ordinary methods of examination. In the second place, he must not use that tube to fill the stomach up as full as it can be. Do not understand me as criticising the speaker, but simply to guard against an idea that we all possibly obtained from the paper. I think the speaker will agree with me that the man who fills the stomach just as full as he can is committing malpractice. It is not simply that we are going to kill the patient by filling up the stomach with water, but that we are going to set up a dilatation or that it is going to increase a dilatation already present. There are a good many men who cannot tell where the stomach is, or how large it is, and yet they will talk about that stomach being dilated. If a man knows where the stomach is, let him try it; if he does not know where it is, he ought not use the word dilatation, because it is simply a term. I want to say, Mr. President, that if I had on the one hand a chemical examination of the stomach contents and on the other hand a careful examination of the urine and of the blood and a thorough physical examination, including auscultory percussion, to lay out the stomach in its size and area, I would rather take the second alternative. You can get a great deal more information from those two examinations than you can from the use of the tube. A great many patients get to using the tube themselves and they do enormous mischief with it. I remember one case particularly, dilatation, a case going along

nicely, but the man insisted every time he had a little fermentation of the stomach on using the tube. He lost flesh; lost nourishment; he was removing food from the stomach that he ought not to. If you will give the patient at the height of digestion, that is, an hour after a little meal, two hours after a heavy meal, hour and a half after a heavy meal, a small quantity of concentrated solution of soda and listen over the stomach, you can judge of the acidity by the sound verberations that you get, just as you can judge of the acidity if you pour a weak solution of acid into the palm of your hand with a little soda. That is an excellent test, but mind, you have got to practise it long enough so that you can distinguish the rustling of garments and the movements of the stomach; simply the churning movements. Those you must eliminate. Now if, on the other hand, we know that a patient has either hydrochloric acid or fermentation acid, in cases it is a perfectly easy matter to make the diagnosis. We can almost make them with the statement of the patient.

Dr. LICHTY: I was sorry I was not able to read the paper through. I think some of the objections which Dr. Benedict has brought out have been answered in the text. I think he does not give the general practitioner credit for enough knowledge of the disease of the stomach. I was speaking to the general practitioner and I think the general practitioner knows where the stomach is and will be able to diagnosticate or distinguish between a dilated stomach and a normal stomach. As to the use of the stomach tube—or to the bad use of the stomach tube by the patients—in my paper I have stated that the tube should not be allowed to the patient except under very limited conditions, and I think that Dr. Benedict would have changed his remarks if I could have been allowed to finish the paper. In reference to the specialist of the stomach, I might say that not many years ago, when I heard Prof. Ewald in one of his lectures at his clinic, he denied that he was a specialist in disease of the stomach and said that he was a general practitioner, but that he thought the stomach tube revealed such an amount of material to the practitioner in general that every man who practises medicine should have some knowledge of it, and as the general practitioner receives the bulk of the patients and probably one-third of them have some trouble with the stomach, he ought to avail himself of the information which can be obtained by the use of the stomach tube.

Dr. BENEDICT, of Buffalo: May I be allowed just one word? Mr. President, I think the doctor and I have each been a little hurried and have, perhaps, put things in a way that suggest some antagonism where there was no such intention. My remarks about specialists have simply to do with this point: Has a man time in which he can make a thorough study of the subject; not whether he is well informed, but can he do the good, hard grinding and put the time on the work that alone will make it valuable? That is the only point I wanted to make in that regard.

THE danger of bringing yellow fever into the United States through the medium of vessels used during the transportation of troops to Cuba and their return, is by no means a small one; but the navy department has determined to adopt every precautionary measure for the prevention of such accident and will thus coöperate with the marine hospital service.—*Ohio Medical Journal.*

LOCOMOTOR ATAXIA; ITS RECENT PATHOLOGY AND TREATMENT.

By F. GUILLEMONT, M. D., Niagara Falls, N. Y.

TO COMPARE what is at present known of the pathology of locomotor ataxia with the theories generally accepted up to within a few years, is one demonstration of the phenomenal advancement made in all branches of science within the past decade. Scientific research has many dark corners to lighten up in all its branches, but in none has it more scope than in that of neuropathy. Indeed, up to comparatively a few years ago, the whole nervous system, as regards its physiology and pathology, was almost a closed book and that much-abused but convenient theory of sclerosis was trimmed and molded so as to fit into the pathology of all chronic nervous diseases. We were taught to look upon tabes as a sclerosis affecting the columns of Burdach and Gall and, in the earlier stages, a recent writer described a neuritis of the posterior spinal roots.

The vivid picture set before us during our college course and still holding prominence in many of the more recent text-books, is one not easily forgotten; the inflammatory action within the nerve sheath with its exudation of lymph, round-celled infiltration of the neuroglia and proliferation of connective tissue elements, followed by organisation of cicatricial tissue, with consequent shrinkage and choking of the delicate nerve structures; the continuance of these pathological changes producing destruction of function after function and finally the picture presents a case utterly helpless beyond the one false hope of the connective-tissue-absorbing properties of iodide of potash.

The later conceptions of the pathology of tabes are mostly due to Woldyer's demonstration of the neuron and its disassociation from the central nervous system. Contained within the posterior spinal ganglion we find a small body called the neuron or neuron-body; from this are given off nerve filaments extending in one direction along the posterior spinal roots and up the spinal cord, entering at Burdach's column, and in the lumbar cord, crossing over to Gall's column, up which it extends to the oblongata, when it terminates by numerous filaments called arborisation. This branch is called the spinal neuraxon. In the other direction these fibers are directed peripherally along the spinal nerves and terminate in a delicate arborisation at the muscle-spindle. This branch is called the peripheral neuraxon.

1. Read at the Niagara Falls Academy of Medicine, April, 1898.

Perhaps a few words on the muscle-spindle will help clear the way for further explanation. Although this body has been known for over half a century and its functions variously interpreted, only recently has it been demonstrated that it is really an organ of muscle sense. It has been described as an organ of sensation within an organ of motion and to it have been attributed the posture and weight senses. It is a spindle-shaped body, about one-third the size of the surrounding muscular fibers. It is contained within a sheath and is composed of lymph and a few delicate fibers within the sheath. Each spindle has an artery and a vein and also a nerve supply. The nerves are afferent in direction and constitute the peripheral branch of the neuron. Now, with a picture before us of the neuron-body, its spinal and peripheral branches and also the muscle-spindle, we may proceed to apply these later anatomical developments to an explanation of the changes that take place in locomotor ataxia.

Graphically speaking, we may consider the neuron, its branches and the muscle-spindle as one organ; an organ that governs coördination by virtue of its muscular sense and this organ is independent of brain control, much the same as are the reflexes. Take, for instance, a condition of generally lowered nutrition of the nervous system, which may result either from predisposition—hereditary or acquired—or from excessive mental strain or, which is perhaps more frequently the case, presence of toxins in the blood—syphilitic or otherwise, accounted for, would we not in such a condition expect those tissues with the least power of resistance or those less stably organised to show the first signs of disturbance? The muscle-sense, being one of those highly specialised functions and one of a more recent biological development, any neurotic degeneration would, according to one of nature's soundest laws, assail this weak point first. Now, taking it for granted the neuron element is affected by a condition of lowered nutrition, where would we look for its earliest manifestations? In diseases of the heart and in old age we find the earliest changes in those parts farthest removed from the center of nutrition.

So it is with the changes taking place as a result of lowered nervous vitality. It has been demonstrated by Schafer, Sherrington and Gowers, that the extremities of the neuron element or those parts farthest removed from the neuron-body, *i. e.*, the center of nutrition in the spinal ganglion—are the first to show signs of degeneration or derangement of function. Interference of nutrition in the trophic

centers or neuron-bodies, therefore, accounts for the failure of function in the terminals, producing on the one hand peripheral symptoms, such as loss of knee-jerk, loss of sensation, lightning pains and the like, and on the other hand spinal symptoms, such as optic atrophy, ptosis, visceral crises and the like.

Following these functional changes there comes a degeneration of the fibers within the muscle-spindle and the terminal axes-cylinders of the neuraxons and as the disease progresses there is an extension of the degeneration and secondary sclerosis along the path of these nerves. As it has been pointed out before, the path of these nerves, after leaving the spinal roots, enter the cord at Burdach's column and in the lumbar cord cross over to Gall's column. This accounts for the changes found in these portions of the cord in the later stages of the disease. But it must be remembered that the sclerosis is a secondary manifestation and not a primary sclerosis, as was heretofore held.

The primary sclerotic theory had for its justification the post mortem findings of such cases, but these signs of sclerosis were only found in old cases far advanced into the ataxic stage. It was notable that in the early stages the changes found in the cord were conspicuous by their absence. The absence of any pathological signs in the cord in the early stages naturally directed the investigator's attention to other parts of the nervous system. So in Osler's Practice of Medicine of 1892 we find the statement that "perhaps the disease begins with a neuritis of the posterior roots within the vertebral canal. Research was further advanced by Sherrington, 1895, and Batten, 1897, both of whom brought forth ample experimental and anatomical proof that locomotor ataxia begins in a degeneration of the nerve endings of the neuron within the muscle-spindle. Although no absolute proof is forthcoming that the degenerative changes also take place at this time in the upper end of the neuron in the oblongata, yet as the tendency of degenerations is to begin at parts farthest removed from the centers of nutrition, we may safely infer that there is a simultaneous degeneration at both extremities of the neuron.

Treatment.—A disease marked by pathological changes, ranging from a mere nutritional disturbance in the first stages to a sclerosis and destruction of nerve elements in the late stages, ought surely to hold out some hopeful therapeutic measures; and more especially as the first stage is not merely transitory and likely to be overlooked. In fact, the first or pre-ataxic stage usually covers a long period

of time and gives plenty of warning by a variety of symptoms not easily misinterpreted.

The therapeutic measures are directed towards the reëstablishment of the nutrition of the neuron-element. The four main factors of treatment are diet, hygiene, rest and electricity. The diet should be liberal—meats, fats, milk and fruits, with considerable restriction on the starchy and saccharine foods. Alcohol should be prohibited. If possible, patient should avoid the extremes of heat and cold; should wear warm clothing and the action of the skin, kidneys and bowels carefully looked after. When possible complete rest in bed is advisable, but where not practicable a few hours during the day should be given to sleep. All mental strain and sources of worry should be eliminated.

Drugs, especially those of nutritive value, are useful, such as phosphorus, iron, cod liver oil and strychnia. For lightning pains, both aluminum chloride and methylene blue have been used with good results. Electricity is of the greatest value, if properly employed. The galvanic current alone gives good results. A current of high voltage and low ampherage, administered by means of a foot plate and neck electrode, is the most beneficial. The sittings should last for ten minutes and be repeated every alternate day.

A course of treatment, such as outlined above, should be continued for from four to six weeks and be repeated once or twice yearly. Under this treatment all cases show marked improvement, some more than others, depending on the stage of the disease.

Before closing this brief summary, I wish to invite attention to the recent mode of treatment instituted by Frenkel, of Switzerland, especially adapted to cases advanced into the ataxic stage. The idea of this treatment is to teach the patient, again by a systematic training, the coördination of muscular action that he has lost. The patient is instructed to place the hand or foot on a certain spot and practise at it until he can accomplish such action with exactitude. After one accurate movement is learned, another is tried, and so on. It is claimed for this method that walking and other voluntary acts can be accomplished with precision, even after years of bed-ridden helplessness.

An article of this form of, treatment, well worth reading, can be found in the February *Therapeutic Gazette*.

In concluding this brief sketch I wish to lay special stress on the necessity of an early diagnosis. Therefore, in all cases of so-called rheumatism, accompanied by pains, not strictly articular and in cases

of disturbed vision, we should keep tabes in mind and a proper investigation will often be the means of warding off one of the most dreaded of neurotic complaints.

550 MAIN STREET.

STRICTURE OF THE URETHRA.[1]

By J. HENRY DOWD, M. D., Buffalo, N. Y.
Genito-urinary surgeon Buffalo Hospital Sisters of Charity, etc.

I TRUST you will pardon me if I say at once that I shall not burden you with that which is available to all and can be read and studied at a more opportune time than the present, when there is before this society subjects of vaster importance; but I shall hurriedly say a few words of the cause, pathology, symptoms and of the more important part, the treatment. Urethral stricture may be congenital or acquired. I cannot give statistics only to say that from the examination of the urethra of at least 200 males I have never but twice found a well-formed stricture occurring in patients who could give no history of injury and had never had a gonorrhea until four or five weeks before they were sent to me.

The contractions were $2\frac{1}{2}$ and $4\frac{1}{2}$ inches from the meatus, the former one catching a 24 and the latter a 22 bulb. In front and behind, the canal measured 30 F. The acquired variety, as you well know, may be due to injury, let it be external violence or the impaction of a foreign body in the urethra, instrumentation or specific inflammatory conditions within—the latter being the cause of 98 per cent. of all strictures. The acquired variety we may divide into inflammatory, traumatic, spasmodic and organic. I think the first should be dropped. The fact is not disputed that during an acute attack of gonorrhea the caliber of the canal is lessened in a marked degree, but as the inflammation subsides the normal is again reached, and provided the case has been properly treated no localised spots remain which can become the foothold for a commencing cicatrix. On the other hand, chancre or chancroid will generally be followed by contraction, owing to the depth of the tissue involved. Looking at strictures as something of permanency until relieved by operation, I am in doubt whether the name spasmodic should not be changed to urethro-muscular spasm. The fact cannot be denied that on passing a sound or other instrument for the first time into the urethra of a

1 Read at the thirtieth annual meeting of the Medical Association of Central New York at Buffalo, October 19, 1897.

highly nervous person it becomes suddenly stopped, but on waiting a few minutes it readily enters the posterior urethra. Retention will also take place from spasm of the muscles, due to reflex causes, or as every one has experienced from operations around the rectum or perineum; still I am inclined to think the last condition more often due to inhibition or blunting of the nerves governing the urination sensation.

Traumatic injuries to the perineum and penis are fruitful causes of stricture, and let me say right here these strictures from their incipiency are best dealt with by the knife; in other words, cutting them seems to be the only remedy through which we can hope for results. By far the most common injury is due, as the laymen say, to "breaking a chordee," or by forcibly straightening a curved penis during erection, the mucous membrane being torn with a resulting cicatrix.

Organic.—Under this head we find the cause of at least 98 per cent. of urethral strictures and the all-important cause is gonorrhea. I have never seen a stricture due to masturbation; still, on the other hand, I have seen and treated a case where retention of urine lasted for four days, due to the injection of a strong solution of bicloride, yet no stricture followed. The two latter classes can be divided into large and small and these again into linear, anular and tortuous, which may be from one to two or even three inches long. Further, a division can be made into irritable, which always bleed freely, and resilient, which on being stretched at once assume their former size. The symptoms of stricture as put down in the text-books are very misleading: suffice it to say, however, that the caliber of the canal must be very much lessened; in fact, a stricture to conform to the symptoms generally found in text-books must be on an average of from seven to ten years old. There are important symptoms which arise that should lead us to an exploration of the urethra, thus diagnosticating contractions before the tissue takes on a cartilaginous character. A clear urine containing shreds consisting of pus cells, held together by mucus, should be just cause for examination of the canal, where in all probability a contraction will be found, behind which is a chronic inflammation, furnishing the above named shreds. Constant burning of the glans in the absence of any inflammatory manifestation, perineal pains, pains shooting down the inside of the legs, pain in the back or soles of the feet, repeated glandular herpetic eruptions, headache along the occiput and vertex, should always cause the urethra to be examined for contractions. I have on my history book and reported at the academy of medicine a case of pronounced dyspepsia which disappeared entirely on dilatation

of his stricture. For other symptoms I shall have to refer you to any good book on genito-urinary surgery. The location of stricture depends mostly on the vascular and dependent portion of the canal, and this we find at or near the bulbo-membranous junction, where 67 per cent. of all strictures are located, the other 33 per cent. being one inch behind to two and a-half inches in front of the peno-scrotal angle.

Before speaking of the detection of stricture let me say a word as to large and small calibers, for on this point authors disagree. Some claim that when a No. 18 F bulb is caught it indicates a small caliber. Hayden in his book gives no place to them, but speaks of chronic localised inflammations, this probably conveying his opinion of such conditions. I am inclined to the opinion that, using the Otis measurement of the flaccid organ as a standard, a bulbous bougie that catches indicates that stricture exists; if none is found and still symptoms continue the canal should be examined by the electro-endoscope. If the mucous membrane is normal it will as the tube is withdrawn close around the end as though tied by a string. On the other hand, when localised inflammation, especially involving the submucous tissue, there will be a sort of funnel formed, simply indicating that due to the underlying inflammatory processes the membrane cannot fall together as when normal. At these spots generally will be found localised foci of inflammation—possibly granulations. Reginald Harrison says "nature to prevent a leakage of urine throws out plastic material as a pavement and this in time changes into tissue having a tendency to contract, thus stricture is formed." These funnel-shaped spots I will call stricture of large caliber and which if left alone will in time form true stricture, being able of detection with a bulbous bougie. For the detection of stricture it is advisable to use a bulb. The Otis urethrotome at times will deceive you.

A word or two as to the remote damage caused by urethral stricture and especially so if of long standing and very small caliber. Cystitis in a chronic form usually develops from along continued obstruction to the passage of urine, and when well-seated is a very difficult thing to cure. Ureteritis and pyelitis are more common results of stricture than has been thought. To have pain in the back before pyelitis is thought of is as absurd as to think that a patient with chronic nephritis must have backache before we think of diagnosticating Bright's disease. The disease pyelitis when ascending, I am almost safe in saying, is incurable in the male; in

the female, where it is possible to wash out the pelvis of the kidney with astringents, we may hope for results. Ascending nephritis or surgical kidney is beyond the aid of drugs, excepting in the acute stage. In this, as in the former, we must remove the obstruction and trust in God for the ureter not to get plugged with pus, resulting in pyonephrosis, where the only remedy is nephrectomy. Bright's disease may also follow a long continued obstruction to the free flow of urine. In tight strictures there is always more or less prostatitis and the seminal vesicles are at times enlarged and swollen.

Treatment.—Should a person ask me, as I frequently am asked, is stricture curable? I should say yes, by cutting. In innumerable canals examined by me by aid of the electric light, I have invariably found that where cutting has been done, with an interval of years without the passage of an instrument no contraction is noticeable. But is it advisable to cut every case? Decidedly no. The risk of life is 2 per cent., not always by hemorrhage or sepsis, but from shock. Then permanent curvatures will result and impotence will develop, from which there seems to be no appeal. I shall again refer to the old saying, an ounce of prevention is worth a pound of cure. Prevent stricture and you will have none to cut or dilate. Leaving out of the question traumatic, which, of course, cannot be prevented, except those due to breaking a chordee, the latter not occurring if a little explanation is given the patient, we find that most urethral strictures are due to one cause—gonorrhea, and when this is treated as it should be, no complications should remain behind. After a protracted inflammation of the urethra, when all discharge has stopped and the urine is clean, the canal should be examined by electric light. This will reveal to you any localised spots of inflammation, erosions, granular spots or funnel-shaped depressions, conditions that to me are the danger signals that time will change the lesion into that of stricture.

It is at this time that we may prevent these formations if a vigorous course of treatment is carried out by sounds, followed by a very weak solution of silver nitrate, thrown over the entire mucous membrane. Cases coming to us where stricture already exists call for surgical judgment. Shall we dilate or must we cut is the all-important question? I think we should make a fair decision at the first visit, if we use care in the examination. If conditions are found, such as I shall later describe, by all odds the safest and quickest is to cut. With a history from three to five years old, let them be anular, linear or tortuous, good results will follow gradual dilatation. In uncomplicated strictures, that is where the urine shows no great amount of trouble,

either in front or behind the contraction, and where the canal is not inflamed or congested, evidenced by the amount of pus or mucus in the test urine or discharge, no instrument will give the results that can be obtained with the Oberlander dilator, and this with a minimum amount of pain to the patient. It is a well-known fact that the dilatation of the meatus gives more pain than the stricture. Should this be of smaller caliber than the 26 it is well to divide it to 30 F, but not to 35 or even 40 as we see occasionally. As the urethra is not a tube of uniform caliber, but normally 30 to 35 at the bulb and this the seat of 67 per cent. of strictures, you can see by looking at the instrument that it is built to conform with a normal urethra; it therefore dilates the same accordingly. Although we see strictures through which at first it is impossible to pass a filiform, the lumen of the urethra is never completely obliterated: there is always an opening let it be but the size of a hair. The chief cause of failure to pass a filiform is due to the extreme sensitiveness of the contraction and its surrounding tissue, spasm occurring as soon as an instrument touches it. Cocaine will not always facilitate a passage, but deep narcosis has never failed me. Where there has been retention for hours, say twelve to fifteen, and particularly if the stricture is of the old fibrous variety, unless the filiform can be easily passed, suprapubic puncture should be resorted to at once and the stricture looked after later.

Rarely will a stricture be found through which a filiform cannot be passed; when one is in, pass more if possible; if not, leave the first in situ for twenty-four hours and the urine will trickle by it. It is usually found that at the end of twenty-four hours that a 4 or 6 F can be passed easily: if not, three or four filiforms can be crowded by one at a time. Following the instructions given in any text-book, except in a few cases, the normal caliber should be reached in four to six weeks. Never use a steel instrument in the urethra until 18 or 20 F is reached, when the Oberlander is the instrument that will give the best results. A word about Ford's electroliser. Personally I have had no experience, but I have seen Dr. Ford use it. From the amount of blood and the opinion of eminent men who were present also, and have given the subject some little study, I think it causes more damage than already exists. For some time I have had rules as to cutting and which has served me admirably.

1. Irritable.—Those strictures that bleed every time they are touched and are often followed by chills and fever. Cutting here, let it be external or internal, will give good results and if the patient always has a chill give him one and end them at once.

2. Resilient or rubber strictures, as I speak of them to the layman. These should always be cut. For some reason, no one seems to know why, the tissue is very elastic, contracting to its former size almost as soon as the sound has been withdrawn.

3. Tough, fibrous cartilaginous bands, which the sound seems not to be able to effect, and with much force the urethra is liable to be torn either antero or posterior to the contraction.

4. Under this head can be included impassable or strictures where after a good trial it has been found impossible to pass a filiform bougie. Strictures where rupture of the urethra has taken place, or behind which urinary abscesses have formed: in fact, in the last two conditions there is no alternative. Any contraction three quarters of an inch from the meatus and possibly I might include those with fistula behind. A closure of these can take place, still I think the end sought can be more quickly attained if we restore the canal to its normal caliber at once.

For the technique of internal or external urethrotomy I can only refer you again to any good book on genito-urinary surgery, still a few points may not be amiss. Thorough antisepsis must be carried out. The hands of the operator, instruments, urethra, perineum and glans, also the lubricant, must receive the closest attention as to cleanliness. It is the teaching of some and also their practice in doing internal urethrotomy to cut the whole urethra from behind the last contraction to the meatus. Nothing in my opinion can be more absurd. If anyone can give me a good excuse why healthy mucous membrane should be cut for from four to five inches simply to divide one or even two or three contractions on an average of not over one-eighth in width, I may be converted into dividing it throughout, but until then would advise cutting, say one half inch behind and one half inch in front of the stricture; this will divide all contracting tissue and localised inflammation. In doing urethrotomy, especially to the beginner, it is often a fine point to determine when to do an external and when an internal operation. As I have said before, 67 per cent. occur at or near the bulbo-membranous junction; that is, in the neighborhood of one to two inches in front of the compressor muscle, and these should always be cut externally. I think it is safe to say that a rule that can be followed would be to pass a bulb or other instrument that can be easily felt from the outside, and with the tip of the same resting in the perineum and about one and a half inches in front of the anterior border of the anus.

Any stricture above this point can be cut internally and below it should be divided through the perineum. In external operations the perineal tube in the bladder is an absolute necessity, removing it about the end of the forty-eighth hour if there is not much pus: if there is, it can be left longer, say four or five days, and through it the bladder can be washed three or four times a day. Either after internal or external operations, a practice I have long carried out is to pass a full-sized sound every fifth day until the cut surfaces show no tendency to recontraction, then I think it is safe to say the stricture is cured. The operation of Cook or Wheelhouse's external urethrotomy without a guide is at times the most difficult operation in surgery. In all cases where the guide cannot be passed I am in favor of the Wheelhouse minus the hook. To puncture the urethra at the apex of the prostate is an easy thing on paper, but a most difficult thing to do. In a case where this operation may be called for, viz., the perineum filled with fistulæ, it is wisest, in my opinion, to make a suprapubic cystotomy, pass a grooved staff through the bladder and prostatic urethra and up to the stricture and then cut upon it. Should it be impossible to find the opening by this procedure another director can be passed through the penis and the urethra opened anterior to the stricture. Now, with an open canal in front and behind the obstruction it is an easy matter to divide it from without inward. A thought which almost escaped me and which is of the utmost importance, never use too much force in overriding a filiform bougie by a tunneled instrument and especially when an operation is not to be done at once. In doing so you are liable to cut the whalebone instrument in two and have to operate at once, and externally at that, to find the missing half. Salol or boracic acid in good doses is of value and should be given for from three to four days before operating for stricture. I always irrigate a urethra with a half per cent. formaldehyde solution before passing a sound.

223 Franklin Street.

A good cough mixture, in use at Roosevelt hospital, New York:

Codein.	gr. iv.
Acid. hydrocyanic. dilut.	gr. xv.
Ammonii chlorid.	gr. xl.
Syrup. pruni virginianæ	q. s. ad. f ℥ ij.

M. Sig.—A teaspoonful every three or four hours.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Semi-annual meeting, held June 14, 1898.

Reported by F. C. GRAM, M. D., Secretary.

PRESIDENT LUCIEN HOWE called the semi-annual meeting of the Medical Society of the County of Erie to order at 10 o'clock a. m., Tuesday, June 14, 1898, in the parlors of the Buffalo Academy of Medicine.

The secretary read the minutes of the annual meeting and of the special meeting, held May 11, 1898, which were then approved as read.

Dr. W. W. POTTER, chairman of the committee on membership, reported favorably upon the following applicants for membership: Drs. L. E. McC. Pomeroy, Francis E. Fronczak, Carro Julia Cummings, John J. Finnerty, F. W. McGuire and John H. Daniels. They were thereupon elected members. The applications of Drs. N. L. Burnham, James W. Charters and Christ W. Weinbach are pending and will be acted upon when the requirements have been fulfilled.

Applications for membership were received from Drs. John H. Grant, J. C. Clemesha, H. R. Gaylord, A. L. Weil, Emil Lustig and Mary Clayton.

Referred to committee on membership.

Dr. COAKLEY, chairman of the board of censors, submitted the following report:

To the Erie County Medical Society, Buffalo, N. Y.:

GENTLEMEN:—The board of censors respectfully presents to you its semi-annual report for the six months ending June 14, 1898, as follows:

In accordance with the resolution adopted at the last session of the Society this board has employed as its counsel for the prosecution of illegal practitioners in this county, Messrs. Tracy C. Becker and Marc W. Comstock. The Society is indebted to these gentlemen for efficient and successful efforts in the prosecution of all matters entrusted to them.

Several cases of alleged nonregistration and illegal practice have been presented to this board during the past six months and all such instances thoroughly investigated. One case was sufficiently definite and well proven to authorise a prosecution, to-wit: the case against Joseph Rutkowski, a versatile gentleman, who seemed to be acting as barber, dentist and physician. He advertised in a number of papers. He was arraigned before Judge King and the case tried by our counsel, with the result that Rutkowski was held for the grand jury. The grand jury found an indictment and on May 3d Rutkowski pleaded guilty to the charge against him. Judge Titus suspended sentence upon the promise of the offender to discontinue his illegal practice.

We beg to report further that our counsel have made a complete list of all registered physicians in the county of Erie. This list will be compared with the list of physicians in the new city directory, soon to be issued, and all nonregistered physicians investigated. The active efforts of this board in the past, and the publicity given to this work in January last, apparently have had a very salutary effect, the number of cases for investigation having been much less the last six months than previously.

We beg, in closing our report, to express our appreciation of the hearty coöperation rendered us and our counsel by the district attorney's office.

Respectfully submitted.

J. B. COAKLEY, *Chairman.*
IRVING W. POTTER,
THOMAS F. DWYER,
CHARLES E. CONGDON.

The report was received and placed on file.

The treasurer, Dr. EDWARD CLARK, submitted a list of names of members in arrears with their dues, in accordance with a resolution of this society at the last annual meeting. He also explained the efforts he had made toward collecting them.

The chairman ruled that it was unnecessary to lay the details of the report before the society.

Dr. W. W. POTTER moved to hear the report of the treasurer relative to the resolution adopted at the annual meeting. Seconded by Dr. J. C. Brown and adopted.

Treasurer CLARK then completed his report, which, on motion of Dr. Coakley was discussed, and Dr. Coakley then moved that the treasurer continue his efforts to collect the arrears, giving all another opportunity to pay. Adopted.

Treasurer CLARK wanted to know what to do with those members who absolutely refuse to pay, in violation of the by-laws of this society, as well as with those who are advertising in the daily papers.

The president ruled that the motion adopted at the annual meeting and the by-laws of this society made the necessary provisions.

Dr. GEORGE W. ABBOTT stated that he had been a member of this society for forty-five years, paying his dues for the greater part of that period. However, for the past few years he had been unable to meet them and craved the indulgence of the society.

On motion of Dr. W. W. POTTER the accumulated dues of Dr. Abbott were remitted.

Dr. LEON F. HARVEY, of Denver, Colo., presented his resignation as a member, which was accepted.

Dr. J. G. THOMPSON moved the following resolutions, which were adopted:

WHEREAS, The Medical Society of the County of Erie desires to express its appreciation of the sacrifices made by members of the society who have voluntarily given up the comforts of home to endure the privations and perils of active service in the army. Therefore,

Resolved, That we hereby send to Drs. Albert H. Briggs, Eugene A. Smith, Clark F. Bruso, E. L. Ruffner, Harry Mead and John D. Howland a hearty greeting with our admiration of their patriotism in answering so unselfishly and so promptly their country's call.

Resolved, That it shall be our endeavor to have their absence result in as small a professional loss to them as possible, and that we consider it becoming when patients of theirs come to us who remain here to receive such patients only in professional trust as we would from some brother physician whose practice has been for a time left in our charge.

Resolved, That we assure to these absent members, as far as we can, the reëstablishment, on their return, of all their former professional relations.

On motion of Dr. COAKLEY the sum of $20 was ordered paid, as the expense incurred by the censors for detective work relative to securing evidence against illegal practitioners.

Dr. ROSWELL PARK then addressed the society on The modern treatment of gun-shot wounds.

The subject was further discussed by Drs. D. W. Harrington, W. W. Potter, J. B. Coakley and J. G. Thompson, all of whom spoke from personal army experience. A vote of thanks was tendered Dr. Park and the society adjourned at 12.45 o'clock.

Progress in Medical Science.

PEDIATRICS.

CONDUCTED BY MAUD JOSEPHINE FRYE, M. D.,
Physician to the babies' ward, Erie County Hospital.

UNSTERILISED MILK AND THE DEATH-RATE.

AMONG the papers read before the national conference of mayors and councilmen, held at Columbus, Ohio, during September, 1897, was one on The influence of a pure milk supply on the death-rate of children, by Nathan Straus, of New York, the founder of the

depots for the supply of sterilised milk to the poor. Mr. Straus said, in part, as reported by the *Journal of the American Medical Association*: There is practically no milk delivered for general consumption in cities that is fit to be fed in its natural state to young children. I think I have fairly demonstrated the proposition that many thousands of infant lives are annually sacrificed by the neglect to supply for the nutriment of children milk which has been sterilised. I hold that neglect to be criminal and I leave it to you to fix the responsibility for it. We punish murder with the penalty of death, and yet we allow murder to be committed by the wholesale in every populous community of this land with no thought of its punishment and little thought of its prevention.—*Archives of Pediatrics.*

MUNICIPAL CONTROL OF MILK SUPPLY.

HEATH (*Transactions of Med. Soc. of State of New York*) in considering the subject of municipal control of the milk supply suggests that municipal ordinances should embody the following features:

1. All milk houses should be of sufficient and proper size and should have light and ventilation, complying with the rules of hygiene pertaining thereto.

2. They should be constructed of such material as to be sanitary and as much as possible of nonabsorbent material, or so made as to prevent frequent and effectual flushing and cleansing.

3. Communication by doors or other openings, with water-closets, sleeping apartments, or other rooms liable to become a source of offense, should be strictly prohibited, nor should milk-rooms be used for any other purpose whatever than the storage of milk.

4. Storage and cooling boxes should be substantially constructed, lined with metal, elevated well above the floors and away from surrounding walls, to permit thorough cleaning. They should be ventilated into the outer air and properly drained, but no drainage from them should directly communicate with the drainage or plumbing.

5. All plumbing should be strictly sanitary.

6. Rules with specific detailed directions for periodical cleaning of milk-house, storage boxes, cans, bottles, utensils and information regarding the care of milk and possible source of contamination should be adopted and conspicuously posted in the milk-room.

7. Cans should be only of such depth and such construction as to permit ready and perfect cleaning and it should be obligatory that they be cleansed before being returned to the dairy.

8. It should be obligatory that each and every can be tagged at its source, stating the character of the milk, its source, specific gravity as determined at the dairy, with the date and hour of shipment.

9. Milk-rooms should be permitted in cellars only under exceptional circumstances, and then should comply with every requirement of modern hygiene.

10. No milk-house or milk-room should be under the same roof or in connection with any horse or cow stable, nor should it be connected with any unsanitary buildings or surroundings.

11. Construction, equipment, care and management should be such as to obviate the use of disinfectants and their presence or use should be prohibited. Any odor or evidence of them about a milk-house should be construed as evidence of defective sanitation.

12. During the summer months no milk should be used when over twenty-four hours old, and during the winter the age of the milk should not exceed thirty-six hours.

13. Milk on the wagon should be thoroughly protected from the weather, and especially during the summer months, by being properly iced, and should be delivered within certain prescribed hours.

14. No milkman should deliver bottles containing milk, nor leave any receptacle of his own containing milk, at any house placarded as containing a contagious disease, nor should he receive any empty bottles or receptacles from such house, or be permitted under any circumstances to fill or refill any bottle while on the wagon.

A record of all cases of acute contagious diseases occurring upon the route or in the service of each milkman should be kept. Daily reference and scrutiny of the same should be made and upon suspicion of relationship of such contagious disease to any one source of the milk-supply, or any one milk route, immediate investigation and action should follow.

The dealing in milk in small quantities by small shopkeepers, such as grocers, confectioners and others, should be abolished.

HEAT A FACTOR IN THE PRODUCTION OF SUMMER DIARRHEA.

COHN (*Arch. für Kinderheilk.*) studied the milk, the bottles and the artificial food of a number of infants during several years and finds that even where the food is in good condition and unchanged as in breast-fed babies, the heat of summer may disturb the digestion of infants in some unknown way and this must be considered as a factor in the etiology of diarrhea in artificially fed children during the summer months.—*Am. Jour. of Obstetrics.*

THE PHARMACIST AS A MILK DEALER.

In a recent address to the students of the Philadelphia college of pharmacy, Dr. J. Madison Taylor, professor of diseases of children in the Philadelphia polyclinic, urges that in view of their special training, pharmacists prepare and offer for sale sterilised cow's milk and the different modifications of milk.—*Medical Review of Reviews.*

Selection.

THE EVOLUTION OF THE ASEPTIC METHOD IN SURGERY.

By LAWSON TAIT, F. R. C. S., Edinburgh and England,
Professor of gynecology in Queen's College, Birmingham; Surgeon to the Birmingham and Midland Hospital for Women, etc.

I DESIRE to supplement the able paper of my friend Dr. Lewis S. McMurtry, of Louisville, in the February number of the *American Journal of Surgery and Gynecology*, because what I say must be largely of the nature of approval as to his results, something of the nature of correction and criticism and altogether the fulfilment of a desire similar to that by which he is clearly influenced, to reconcile discrepancies and remove difficulties. He looks at the shield; so do I. But we don't look at the same side, and I think each side of value, though the values are different.

I begin with a difference: Dr. McMurtry is good enough to speak of "the Tait school of surgery" and to say that "many leaders of surgical opinion while practising asepsis derided all bacteriological discoveries and repudiated germ invasion as the cause of septic infection," and he in particular accuses me of this blunder. It would have been more convincing if he had quoted a single sentence from my own writings which would have established this charge, which is, indeed, absolutely the reverse of the truth. I have followed all these researches, and do so still, with the utmost diligence, and I welcome each fact with the utmost reverence. But what is a fact, is the question on which we so often split! Look at the most recent researches on the bacteriology of the skin, surely a field most easily open to accurate investigation, and we see contradiction following assertion with bewildering certainty until we close our eyes in disgust. Look at the researches of sterilisation of the hands, a matter on which Dr. McMurtry most properly lays great emphasis, and we find the most

violent discrepancies following one another as fast as sequent and inconsequent papers can be published. As in all new fields of research, far too great haste has been displayed and but half formed guesses have been shed broadcast as "established truths." That I have often mocked at and made fun of this kind of thing is true enough, but only when I found that from beginning to end it was false and incompatible with what I love to call "the science of the housekeeper."

That the air contains the germs of ordinary decomposition has been known ever since the days of cookery. That science revealed exactly what these germs were was a glorious victory, but it did not banish the great truths of the housekeeper. She knew that many things, such as moisture, temperature, specific gravity, absence of light and above all things, "life," modified or even prevented harm being done by the agents of decomposition, no matter what they were. She knew nothing led so certainly to the "tainting" of a piece of fresh meat as putting it on a dirty wet dish in a close atmosphere. To rub it dry, to cover it with powder well rubbed in (if an antiseptic like pepper all the better), but most of all, to place in a current of dry, cool air, was to keep it fresh perhaps for weeks. She knew in fact how to encourage her materials to resist the germs of putrefaction until she finally made them entirely aseptic by cooking them in a tin can and soldering them up. There they kept for years. But she also knew that the simplest forms of life could resist those causes of decomposition so long as life remained. She knew that nonfertilised eggs will keep only a very short time, but that fertilised eggs will, under proper conditions, keep three weeks or more. She knew in fact that this mysterious thing, "life," is the most perfect antiseptic we have, and this prime fact is that which makes all "cultures" and all laboratory experiments fail absolutely in giving results which can with safety be applied to the living being, particularly to man.

When we come to consider man we find all our facts at sixes and sevens and all theories of no avail. The laboratory fails utterly; and whilst in the processes of his body we may see veri-similitude with those of the lower animals, we are met at once by facts which show they are not. Bennett and Rutherford made hundreds of experiments in making biliary fistulæ in dogs and they had an enormous primary mortality, whilst the same operation in the human being has practically no mortality at all. If successful in the dog to the purport of diverting all his bile into test tubes, the dog dies inevitably of starva-

tion. If the same result is obtained in the human subject, he or she fattens on the loss of the bile and suffers in no way from it save in the trouble of skin excoriation. The common femoral artery of a large dog will be closed by four hours' temporary metallic compression, whilst forty hours of the same pressure cannot be depended upon to close a human artery of the same size. Not only this, but human beings alive differ in their individual results from exactly similar conditions in ways altogether irreconcilable with the laboratory facts of bacteriology.

No disease is so certainly recognised in all its detail as typhus fever, for in it alone we have a disease of which not only the clinical facts are absolutely known, but its causation has been established with mathematical certainty. We knew, long before the days of bacteriology, that it arose from and was spread by a living thing. Whether that living thing has been spotted and named I do not yet know and it is wholly immaterial.[1] But Sir Henry Littlejohn has proved that it is a thing, let us say a living organism, which can be created or brought into existence at will, and at will destroyed. It is, therefore, probable, as Darwin suggested, a living organism of some very ordinary kind, which becomes possessed of its terrible powers simply by living on the overcrowdings of human beings. These powers are possibly derived from its living on the albuminoid substance condensed on walls or other cold surface from the rebreathed air of humanity. There is no other possible explanation of such experiments conducted in the Black Hole of Calcutta and in the slums of Edinburgh by Sir Henry Littlejohn and Sir William Chambers. Another stage of the argument is this, that whilst the germs of decomposition will attack every dish of dead milk alike in the same dirty and badly ventilated dairy, the germs of typhus will not attack every person living in the same dirty, overcrowded and ill-ventilated house in the West Port; nor of those attacked will the result be at all the same in any two cases. Some will escape with slight headache, whilst others will die in forty-eight hours of a hemorrhagic attack, before even the rash is developed.

This lands us at the difference between the asepticists and the antisepticists: the former wanted the nidus of the germ altered so that neither pabulum nor resting-places for it could be found; the latter fled after the spores with lotion and plasters and sprays and irrigations, leaving the dirt alone and the overcrowding! Let us try the history of facts.

1. I think we may take it from the contradictory evidence recorded by a learned writer in the *British Medical Journal*, April 2, 1898, that it has not yet been identified.

Lister and I started from common ground. He entered the Edinburgh infirmary as assistant surgeon in 1857 and I as a student in 1860. Syme was professor of clinical surgery and had a special building of his own, lighted and ventilated on both sides, two stories in height and with a reasonable number of beds, the exact number I do not remember, but I should say about thirty. At least the wards always had a startling contrast in every way with those in the contiguous building in matters I shall refer to in detail, and yet the two establishments were separated only by two valves of a swing door.

Personally Syme was the personification of the best type of gentleman, always perfectly dressed in his old-fashioned way, and as clean as a new pin. From his boots to the top of his head no one ever saw dirt, disorder, or the appearance of hurry. He was always washing his hands; I think I may say he washed them every time he touched a patient. His assistants had to be like him, and his old-fashioned nurses were noted for their tidiness and cleanliness everywhere. Through the folding doors what a difference! Everywhere hurry, untidiness, and no mark of what I have just praised in Syme. There was a good deal of dandiness, but much dirt; I shall not venture on any detailed description, though all who took part in it as principals have gone to the majority, yet I might traverse into unintentional exaggeration, and I might hurt the feeling of some who took part in the affairs of the old Edinburgh Infirmary after my time. Suffice it to say, it was a four-story building, badly lighted, very badly ventilated, crowded with students for many hours of the day, with a very insufficient number of nurses, who were void of training; that the wards stank, that they were overcrowded and marked by numerous faults in cleanliness and hygiene which would not be tolerated now in the oldest-fashioned institution in the country. There is an authentic word picture of a similar state of affairs at the same time which will serve to show what Simpson meant by "hospitalism." I shall quote it at length: "The operating table was of wood and of fabulous age. It was sometimes thought necessary to have a new mattress for this table when the stuffing was found to be matted together in lumps by the blood which had during many years soaked through its covering. The only correct garb of the surgeon was a frock coat (the oldest and shabbiest in his wardrobe), which was kept in the surgeon's room and never renewed or cleaned during his twenty years of operative work." (Syme always turned up the sleeves of a dress coat in which he might have shown himself before the operation before his Queen at Windsor.) "The operating theatre attendant

was permitted to employ his spare time in the post mortem room, the surgeons came straight from the dissecting room to operate after simply washing their hands; ligatures were used which had been already spoiled by handling with blood-stained fingers to sew up wounds on a second case." And at Edinburgh these ligatures were always worn ostentatiously by the house surgeon, like a badge of knighthood, in the buttonhole of a coat which often rivaled that of his chief for dirt and evil condition. What were the causes of the extraordinary differences separated by the memorable swing doors?

The prime and real causes were, first of all, that Mr. Syme was a master, that he held his appointment for life, was a rich man and he made his underlings do as he wished. Besides, he cared a great deal for results, as was shown in the notorious trials about perineal section. He was not merely desirous of doing an operation, but he was desirous of seeing the patient cured and well years afterward. Further, he was a great surgeon, in every sense the greatest I have ever seen. Nothing charmed him more than to show us a man upon whom he had done some tremendous bit of work years before, and this alone can be the object of true surgery. On the other side of the door the men were on short tenure of office and, necessarily, some of them were quite incompetent for it. They dashed at their work, they hurried it, they crowded all they could into the ten years they had of it. I saw some awful things in my six years of pupilage in the old Edinburgh infirmary, things surgeons could not possibly bring about now if they tried. It is now a very parrot cry that operations are done now which never could have been done, never were attempted before the days of Lister. This is absolute nonsense if it is meant that Lister has made surgery any safer, and the evidence is at the hands of Lister's own father-in-law, Syme himself. It was etiquette for the physician or surgeon responsible for the treatment of a fatal case to appear at the post mortem. Syme seldom appeared, not that he would not come, for no one ever displayed, to my mind, a keener anxiety to know why he had failed. But look at his gigantic enterprises, enterprises which often, in my own recollection, brought Lister from Glasgow and Bickersteth from Liverpool to have the privilege of assisting. Does Lord Lister remember as I do the awful inguinal aneurism in which the patient was slit, as it seemed, from the middle of the thigh up to the umbilicus? the gluteal aneurisms, the removal of the whole lower jaw, the fearful esophagotomies and, most of all, the thirty-seven consecutive cases of ligation of the femoral artery for popliteal aneurism, not one

of which died. Perhaps, most noteworthy of all, though least capable of theatrical display, were his numerous perineal sections, and all this without a single antiseptic, but with a detailed care for asepsis which was perhaps as great as my own. He would have no assistants' fingers in wounds he made, fingers whose dirt he had no means of gauging and no means of depriving of this deadly influence. Let us remember that Keith, who at least led us into the diminished mortality of abdominal surgery, was Syme's patient (first), then pupil, house surgeon and assistant. Had it not been for the unfortunate quarrel with Lizars in early life, Syme would never have been prejudiced against abdominal surgery. He would have established ovariotomy in the "thirties," and all that has since flown from it would have been done by him, and neither the schools of Lister nor that of Tait would ever have been heard of. Let us hear no more of the nonsense about the bad surgery of pre-Listerian times as having been cured by Lister.

Let me now take Dr. McMurtry somewhat in detail, historically, from the year 1867, that in which I was permitted to pursue an independent course in life and in surgery. As I have said in public more than once, I left Edinburgh with at least one conclusion determined in my mind, that I should never deliberately open the abdomen. The results I had seen in Edinburgh were truly awful—some thirty cases and not a recovery! But then they were all on the other side of the swing door! Fortunately for me, Simpson's early papers on "hospitalism" appeared, and the "battle of the sites" began, at first a sort of duel between Simpson and Syme—to be expected as a matter of course. At first Syme saw no reason for a change of site for the Edinburgh Infirmary, and small blame to him, when considered only from his position. But he suddenly changed his attitude—we have never been told why, but the guess is that it was the difference in the other side of the door which converted him, when he had made known to him its awful significance.

Then he battled only for an alternative site. In 1868 I broke through my formed resolutions and of my first ten ovariotomies only one died, the mortality of an untrained beginner, but the mortality maintained by the intra-peritoneal method unaided by drainage and purgation. Then evil ways fell upon me and I went on with the clamp, raising my mortality to nearly 50 per cent. 1878 saw the short ligatures re-introduced by Bantock and myself, and the principle of perfect segregation of my patients, together with the free use of drainage by the tube and the Seidlitz powder, and the mortality fell to 5.5 per

cent. through the long series of 1,350 cases, published in the report of the Birmingham Hospital for Women for 1893, all hospital cases with report of the every essential detail authenticated by the managing committee of the hospital and my colleague, Dr. Savage, and myself, at whose hands the actual work was done in very nearly equal shares. In my hands were no Listerism, no chemical antiseptics, nothing but plenty of soap and water vigorously applied, and strict attention to detail. In Dr. Savage's work, as he permits me to say, he followed Lister in fashion of his own, varying from time to time, and the fact that we arrived at results almost identical is more convincing than anything else that chemical antisepsis was an altogether unnecessary factor. No malicious assertions that our statistics have been cooked can touch such a solid fact as this, and our critics have been invited to go over the record for themselves.

Dr. McMurtry says, what I have over and over again asserted, that "the great facility of absorption possessed by the peritoneum made abdominal surgery the field of conflict for deciding the comparative merits of asepsis, and the relation of bacteria to wound infection generally." Here another triumph was secured by Mr. Sampson Gamgee, whose system of dry-dressing by absorbent and expanding cotton wool constitutes one of the most brilliant contributions to modern surgery, from which I have made my departure for sixteen years. Equally true is what Dr. McMurtry says of animal ligatures, but then I limit this to fine silk, the best, the least dangerous and most trustworthy of all ligatures, and for every purpose.

"Hospitalism" and "the battle of the sites" have transformed all the hospitals from shambles into palaces. Money flows in and honors follow it, so soon as the rebuilding and reconstruction of an old hospital is proposed. Small hospitals under various names are spread over this land in countless numbers, and with these more complete segregation of the patients is the chief object. And when a due interval has elapsed anyone who collects a few thousands of their cases of amputation and contrasts the result with the terrible record of my "hospital mortality" for fifteen years, 1860 to 1875, will prove to the world the immense change for the better by Simpson's agitation.

The case against Listerism is very tersely put by Dr. McMurtry in these words: "Much confusion arose from the failure to recognise the power of the tissues to resist germ invasion and that in all surgical operations a certain degree of bacterial infection is overcome

by this resistance." A corollary to this is, of course, that the extent of the wound aided by the increase the extent of bacterial infection. Had it not been so, Lister, to be consistent and careful of his own welfare, ought to have been shaved every morning under the spray, or at least under an irrigation, for one germ would be as fatal as a million. Again, Dr. McMurtry's words are true to the letter when he says: "Reliance upon antisepsis begot a disregard for mechanical cleanliness and established a confidence in chemical germicides to atone for slovenly methods throughout an operation." So we heard men in great surgical positions say in society debates that they would go unhesitatingly to the operating theater from the post mortem room or the dissecting table and perform an ovariotomy, provided they were allowed to wash their hands in a 5 per cent. solution of carbolic acid! This was our danger, but there was another as great, perhaps greater: Listerism became a fetish, a royal road to surgical success, by which men ventured to travel in surgery whose hands fitted them only for field labors.

So far Dr. McMurtry and I are agreed, but here we take different paths. He says that our discussions have now ceased and that throughout all civilised nations, where surgery is taught and practised as a science, the principles of Lister are accepted and applied. It is not so; it shall not be so as long as I live and can write. The agent may be the germ of decomposition or a specially and sportively-endowed germ, but the answer to him is the condition of his surroundings. With exact and scientific recognition of the germ seems to me only the beginning of the mystery. I believe, with Keith, as quoted by McMurtry: "It was the willing and tender, though unclean hand of the surgeon, that carried the poison into the wounds." As my experience grows, as I ponder year after year over fatal cases, this conviction gets stronger and stronger.

I have eliminated every cause of death (save accident, and that so far as I can), save the poisoning hand, and there every now and then I am beaten, beaten in the most sudden and overwhelming fashion, in cases where there can be no other explanation, and in some where I have seen it plain enough. Thus I operate on a huge perineal abscess, and the smell is enough to empty the house. My fingers are soiled by the horrible pus, and I wash and wash with germicides and perfumes and the smell remains for days. Nobody will persuade me that it is the presence of germs that continues the awful smell. It is the presence of something far more potent than germs, probably a secretion of theirs, which soaks deep, deep into

the skin, far beyond where a germ could go. The slightest access of these germs to an abraded finger means something little short of death. A post mortem was held on one of my patients with such an abscess as this round the kidney, and of the three men present two, who had no contact at all actually with the putrid pus, died of putrid sore throat in a few days, and the third was seriously ill. This peculiar putridity is common in perineal abscesses and in abscesses of the cheek. It is also met with in and around the kidney, in the peritoneum when the bladder is an active factor in the suppuration, and in all cases of purulent peritonitis—and chiefly of puerperal origin. It is a most deadly thing when introduced into the peritoneal cavity by the finger of the surgeon, even days after his contact with it. Some years ago I opened the abdomen of a woman four days after her labor for purulent peritonitis and encountered this fearful putridity. Having strong suspicions of its deadly character, I soaked my hands for hours in various germicidal lotions as hot as I could bear them, till my hands were like those of a washerwoman. On the third and fourth days after, I operated on two simple ovarian tumor cases, and the rapidity with which these two women succumbed was altogether shocking, the post mortem examination leaving no other guess than "acute septicemia." A perfectly parallel experience has been the melancholy fate of one of my recent assistants.

Then, when I find the outcome of the most recent investigations of the scientists, I think of Keith, conspicuously devoid of any science, and I conclude that he knew more and was humbler in his belief than the proud-hearted investigators. I am on his side. Even if every word of the ever-changing doctrines and details of the Listerian system were true (and as I have often said there is much true, but not much new), I say it is only another notch in the tree, and not a big one. Even if it were true what Dr. McMurtry claims for it, now we see what a humiliation it would be to have to confess that after all this fight for a quarter of a century it results only in the old advice to the Assyrian, "Go, wash, and be clean."

If we had watched Syme more closely, and had listened to Simpson with ear other than that of the adder, closed and deaf, we had not needed this fight.—*Am. Jour. Surg. and Gynecology*, May.

CONTRACT medical practice was recently discountenanced by resolution by the Connecticut State Medical Society. It was held that the making of contracts for medical service at a fixed annual rate with lodges, mutual benefit societies and medical clubs was unprofessional.

BUFFALO MEDICAL JOURNAL.

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MEDICAL STAFF OF THE ARMY.

JUST at this time when so many of our citizens are entering the army as volunteers, there is no more absorbing question than that pertaining to their care in case of sickness or wound. Nothing is more comforting to their friends at home than the assurance that they will be skilfully and kindly cared for should dire misfortune overtake any of the "boys," as they are familiarly called, in the direction named. There are some—we hope not many—who believe or fear that a sick or wounded soldier often is treated with indifference, not to say with rudeness or even neglect. As a matter of fact the very reverse is what happens.

In the first place the government is very cautious in the selection of its medical officers for the army. They are subjected to rigid examination before appointment and they are carefully watched afterward. If any turn out to be incompetent they are promptly detected and speedily removed from authority. The chief medical officers of army corps or divisions thus far appointed are mainly taken from the regular army. Those already chosen from civil life are, for the most part, men of reputation, many having had military experience in the civil war or with the militia.

Coming now to the regimental medical officers who stand in the relation of family physicians to the troops, we may point to those serving with our 65th regiment as an example. Dr. A. H. Briggs, the surgeon, is one of our best physicians, a man of skill, judgment and kindness of heart. His two assistants, Drs. Mead and Ruffner, are young men of energy who have been well trained and will assuredly become faithful coadjutors of Surgeon Briggs. No father, mother, or near relative or friend need fear any neglect of their kinsmen by these men.

We are here reminded of a parallel that happened when Buffalo's first contribution went to the civil war. One of our foremost physicians, Dr. Charles H. Wilcox, became surgeon of the 21st Regiment and no man could have been more faithful to his trust than he. History, we believe, is repeating itself in the case of Dr. Briggs.

It is quite probable that the surgeons and assistant surgeons of other regiments in this and other states have been selected with quite as much care as those who have been appointed to the Buffalo regiment; hence, we repeat, there is no cause for anxiety with reference to the professional care of our soldiers. The medical care of soldiers is a daily necessity, hence regimental medical officers should be competent physicians, skilled in hygiene, preventive medicine, diagnosis, therapeutics and everything that pertains to the practice of medical science. Their surgical skill is of less importance, because it is only occasionally required, whereas as physicians they are constantly employed. Operating surgeons will be appointed to do that work when the necessity arises and those will be selected to perform that duty who display an aptitude for it.

In the care of sick and wounded our government supplies material with a most lavish hand. Every known necessity, not to say comfort and convenience is provided for the treatment of the sick and the care of the wounded. Field hospitals of divisions will be the campaign unit, and these will be administered by men who have executive capacity and judgment of a high order. In the civil war regimental hospitals proved inadequate and were abandoned after the first year, when division hospitals were substituted. Profiting by this experience a similar order has been issued by the surgeon-general. These hospitals will be supplied with blankets, dressings, stimulants, anesthetics, food, in short everything needed for an emergency to ensure prompt attention to the disabled soldiers. Ambulances, hospital ships and hospital trains will be luxuriously fitted out for their transportation to more permanent hospitals.

All these hospitals and everything pertaining to the management will be subjected to frequent inspection by competent officers, whose duty it will be to see that they are kept at all times up to the highest standard of efficiency and to report defects or incompetency. Under the scientific eye and skilful hand of Surgeon-General Sternberg, who is organising and directing all this vast machinery, there need be no fear that the work will not be done. On the other hand there is every reason to believe that General Sternberg will so conduct the

medical department of the army as to bring credit to the American medical profession from which has been chosen the finest army medical staff the world has yet seen.

CONSOLIDATION OF THE BUFFALO MEDICAL SCHOOLS.

IN AN appropriate place announcement is made of the union of Niagara University medical college with that of the Buffalo University medical school. There was undoubtedly some surprise among the friends of both colleges when the announcement appeared in the newspapers, and perhaps it occasioned regret on the part of some friends of Niagara, especially its alumni. On this account perhaps a few words on the subject in these columns may not be deemed out of place.

When the medical department of Niagara University was organised fifteen years ago it was believed that there was room for such an institution with advanced standards, which should include higher preliminaries, longer college terms and separate final examinations. These were all adopted by Niagara and the history of the college shows that it was not organised in vain, nor has its example proved futile. It has served to point the way to a better state of affairs in medical education not only in this state but all over the country.

At the present time it is required in this state on the part of a medical student, that he shall possess an English education equivalent to that of a graduate of a high school before he can enter upon the study of medicine. He must then attend a medical college for four years, after which, if qualified, he may receive a diploma. This, however, will not entitle him to practise; for he must now submit to an examination by the state, which if successfully met will entitle him to a license.

When Niagara was organised in 1883, no preliminaries were necessary, except such as each medical school might see fit to impose, two years was a legal college course, and a medical diploma, no matter how obtained we had almost said, conferred a right to practise. Who shall gainsay the statement that the bold stand taken by the faculty of Niagara in 1883 has not contributed to the conditions prevailing in 1898? Dare anyone assert that Niagara as a pioneer in the movement toward higher medical education in this state is not entitled to a high measure of praise? If the school in view of the

changed conditions herein referred to has apparently outlived its usefulness, is there any dishonor in yielding up its individuality? When the great volunteer army of the civil war had conquered a peace it disbanded and returned to civil pursuits.

Let the alumni of Niagara always feel pride in the honorable part their alma mater bore in the contest for better education, and if a feeling of regret cannot be repressed at its union with Buffalo, thus sinking its identity in a measure, let it always be remembered that its fifteen years of collegiate life can be pointed to as an era that adorns the brightest page of medical history in this country—that of reform in medical education. All honor, too, to the faculty that made sacrifices to accomplish such results and that further sacrificed its separate existence as a teaching body to the spirit of the age which has announced to the people with all the forcefulness of a Delphic oracle "There are too many medical colleges."

THE *New York Journal* added to the medical literature of the country a week or two ago by publishing reports of two discoveries. One was a tuberculosis "cure" credited to Dr. Murphy, of Chicago, the inventor of the Murphy button; the other Prof. Koch's discovery that the malaria germ was transmitted by the mosquito. In justice to Dr. Murphy it should be said that the word "cure" is used by the *Journal* and not by him. These reports are illustrated with newspaper sketches of the germs of tuberculosis and malaria which are amusing evidence of the inaccuracy of newspaper science. The sketches of the tubercle bacillus look more like a flock of wild geese making their fall flight than anything else, while as for the malaria germs, the sketch has a sort of a Good Friday flavor, the illustrations appearing more like a series of hot cross buns than pictures of plasmodia or crescents. Newspapers are great factors for good and are admirable public educators, but they are as yet rather astigmatised in looking at scientific matters. Their well-intentioned efforts and their accomplishments do not always match.

ACCORDING to the advertisement of one of the New York department stores, printed in the *New York Herald* a short time ago, the Murphy button seems doomed to disuse. The advertisement, after speaking of the many useful articles for sale for wedding presents, gravely announced a fine assortment of "handsome glass bowels." Just imagine the operative procedures of the future when it will

only be necessary to send in an order to the department store for some "handsome glass bowels" and put 'em in. Then, indeed, there will come sad days for the Murphy button and its merry click will be silenced forever.

RICHARD HARDING DAVIS took his pen in hand awhile ago and wrote for the *New York Herald* an article describing a laparatomy performed on the cruiser New York. It was thrilling to the lay mind; it was bloody; it was a lurid picture, painted by a fleeting pen in the hands of an accomplished but over-enthusiastic and highly imaginative novelist. Mr. Davis said, in describing events after the operation, that the patient lying on a cot, opened his eyes and saw the surgeons standing about him with arms covered with blood up to the elbows. Then he added that the operating table "dripped with blood." Surely these be bleeding war times, but we hope the New York recovered.

THE JOURNAL learns on what may be considered very good authority that Dr. Wende's efforts in behalf of the schools and school children will be crowned with success in the near future.

ON ACCOUNT of the pressure upon our columns this month we have been compelled to omit the publication of the chapter on medical history in Erie county. It will, however, be resumed in August and continued without intermission until completed.

PERSONAL.

DR. JOSEPH PRICE, of Philadelphia, visited Buffalo, on Tuesday, June 28, 1898. He was the guest of Dr. Charles E. Congdon, and made an abdominal section at the latter's private hospital during the day. In the evening Dr. Price read a paper at the Academy of Medicine entitled, Discussion and diagnosis of suppurative forms of intrapelvic disease and its surgical management. The meeting was well attended and the subject was debated by several of the members. Dr. Price returned to Philadelphia on a late train after the meeting.

DR. JOSEPH MCDOWELL MATHEWS, of Louisville, Ky., was elected president of the American Medical Association at its recent annual meeting held at Denver, Col. Dr. Mathews is one of the foremost

men in the profession of medicine and the association by its choice has honored itself quite as much as it has honored him. His election is an indication that advanced methods are beginning to take hold in that body, and we predict a prosperous year in its affairs under the guidance of its new and accomplished president.

Dr. Floyd S. Crego, of Buffalo, announced, under date of June 10, 1898, that he had returned home and resumed practice. Office and residence, 469 Delaware Avenue. Hours, 8-10 a.m., 2-3 and 7-8 p. m.

Dr. Chauncey Pelton Smith, of Buffalo, announces the removal of his office from 510 Delaware avenue to No. 90 North Pearl street, corner of Allen. Hours, 8-9 a. m., 2-3 and 5.30-6.30 p.m. Telephone.

Dr. Julius Ullman, of Buffalo, has been appointed instructor in clinical medicine and assistant in the bacteriological laboratory at the University of Buffalo.

Dr. Irving M. Snow, of Buffalo, was elected one of the vice-presidents of the American Pediatric Society at its recent annual meeting.

OBITUARY.

Dr. John A. Larrabee, of Louisville, Ky., one of that city's best-known physicians and one also who was well known in his profession all over the country, died June 12, 1898, of Bright's disease, at the age of fifty-eight. He was a native of Maine and a man of wide popularity. He contributed largely to medical journals and was the author of many treatises on diseases of children and was a teacher of ability. He held the chair of obstetrics and diseases of children at the Hospital College of Medicine and was president of the joint faculties of the medical and dental departments of Central University of Kentucky. Appropriate resolutions of respect were adopted by these bodies in joint session and they attended the funeral in a group.

Dr John Blair Gibbs, assistant surgeon on duty with U. S. Marine Corps, was killed by the enemy at Guantanamo Bay early in the morning of June 12, 1898, while seeking the shelter of a block house during the fierce attack upon the camp by the Spaniards. He aban-

doned a lucrative practice to enter the service and was the first American officer killed on Cuban soil. His example is worthy of emulation and his early sacrifice is to be deeply lamented.

Dr. A. P. Southwick, of Buffalo, one of our best known dentists died June 5, 1898. Dr. Southwick was one of the foremost men in the dental faculty of the University of Buffalo and was largely instrumental in bringing about a substitution of electricity for the rope in capital punishment in this state. His funeral was largely attended by dentists and citizens. His burial was at Forest Lawn.

Dr. C. C. Johnson, of Gowanda, N. Y., died at his residence in that village, June 7, 1898. The members of the Lake Erie medical society attended the funeral, June 9th, in a body.

SOCIETY MEETINGS.

The Medical Society of the County of Erie held a special meeting, Thursday evening, June 23, 1898, to consider the propriety of taking some action concerning the status of the nursing-bottle ordinance. The vice-president, Dr. J. B. Coakley, called the meeting to order and stated its object. Dr. H. R. Hopkins offered the following declaration of principles and resolutions :

Whereas, The Medical Society of the County of Erie, in common with the profession of medicine and other well-informed and high-minded persons, maintain the following principles, to-wit :

That the preservation of the public health is the first duty of the state ;

That the prevention of the communicable diseases is the plain and imperative duty of the sanitarian ;

That the responsibility of the state to afford protection to its citizens increases with the ignorance, carelessness and helplessness of such citizens ;

That of all our objects of protection, none are more helpless or in more constant need of wise and discriminating care than the newly-born, who must be reared by artificial feeding ;

That the death-rate among the artificially-fed newly-born marks the level of the sanatory enlightenment of the community ; and

Whereas, Competent medical opinion has and does unhesitatingly and unanimously condemn a certain type of feeding bottles in frequent use ; and

Whereas, Inspired by such well-founded conviction, ordinances forbidding the sale of this apparatus were recently enacted by the proper authorities of the city ; therefore

Resolved, That we approve heartily and in the most unqualified terms of the ordinance prohibiting the sale of any bottle that has connected therewith a rubber tube, hose or similar contrivance;

Resolved, That as the relations between the professions of medicine and pharmacy should be most reciprocal and harmonious we commend to the druggists and pharmacists of our city our health ordinances in general and with greater particularity the ordinance forbidding the sale of a certain class of feeding bottles as timely, wise and in the best interests of the public health and that we invite them to join us in supporting these ordinances with their most earnest and constant efforts;

Resolved, That we commend to all those in authority the subject of the preservation of the lives of the newly-born and those of tender years as of the highest practical importance and deserving of their incessant and sleepless vigilance.

Dr. Hopkins supported the foregoing in a timely speech that abounded in well-chosen sentences. After further remarks by Drs. Snow, Bayliss, W. D. Greene, Potter, Ring, the president, Dr. Lucien Howe and others, the preamble and resolutions were adopted.

THE Medical Society of the County of Chautauqua will hold its annual meeting at the Hotel Atheneum, Chautauqua, N. Y., Tuesday, July 12, 1898, at 11 o'clock a. m. The program is as follows: (1) Election of officers; (2) President's annual address; (3) Case of secondary hemorrhage, Dr. M. N. Bemus, Jamestown; General discussion; (4) Report or presentation of interesting cases; (5) Paper, Duodenitis, Dr. V. M. Griswold, Fredonia; (6) Paper, Appendicitis, Dr. J. J. Mahoney, Jamestown; Discussion, Dr. T. E. Soules, Cherry Creek and Dr. Geo. F. Smith, Sinclairville; (7) Paper, Brain Tumor, Dr. Wm. C. Krauss, Buffalo; Discussion, Dr. L. Hazeltine, Jamestown and Dr. L. C. Green, Panama; (8) Paper, Early diagnosis of malignancy in abdominal and pelvic disease, Dr. C. C. Frederick, Buffalo; (9) Paper, Dr. Wm. Seman Bainbridge, New York City. The annual election of officers will take place before dinner. There will be an evening session of scientific work to which all are earnestly requested to remain.

THE Thomas J. King Medical Club is the name given to a new organisation that was perfected at Delavan, Cattaraugus Co., N. Y., June 18, 1898. Its membership will include physicians residing in the northeastern towns of Cattaraugus and adjoining towns in Erie, Wyoming and Alleghany counties. Meetings will be held in June,

August, October, January and April, at places to be designated at the previous meeting. Its next meeting will be held at Springville, August 11, 1898. The officers are: President, Dr. Clarence King, of Machias; vice-president, Dr. William H. Jackson, of Springville; Secretary and treasurer, Dr. W. J. C. Evans, of Farmersville Station. At the initial meeting Dr. King read a paper on Dyspepsia.

MEDICAL COLLEGE NOTE.

THE medical department of Niagara University has been consolidated with the medical department of the University of Buffalo. The final details of the union were arranged June 21, 1898, although it appears that the proposition has been under consideration for some time past by leading members of both faculties. The additions to the teaching corps of Buffalo resultant are as follows: Thomas Lothrop, M. A., M. D., Ph. D., honorary professor of obstetrics Alvin A. Hubbell, M. D., Ph. D., clinical professor of ophthalmology and otology; Henry D. Ingraham, M. D., clinical professor of gynecology and pediatrics; Herman Mynter, M. D., clinical professor of surgery; Herbert Mickle, M. D., adjunct professor of clinical surgery; Carlton C. Frederick, M. Sc., M. D., clinical professor of gynecology; John A. Miller, M. Sc., M. A., Ph. D., associate professor of organic chemistry and toxicology, Eugene A. Smith, M. D., adjunct professor of clinical surgery; Henry C. Buswell, M. D., adjunct professor of principles and practice of medicine; W. Scott Renner, M. D., C. M., clinical professor of laryngology and rhinology; Walter D. Greene, M. D., clinical professor of genito-urinary diseases; Harry A. Wood, M. D., clinical professor of insanity; Earl P. Lothrop, A. B., M. D., adjunct clinical professor of obstetrics; Alfred E. Diehl, A. M., M. D., adjunct clinical professor of dermatology; George Roberts, M. D., adjunct professor of pathology; Emil S. Tobie, A. B., M. D., instructor in materia medica; Wm. K. O'Callaghan, M. D., clinical assistant in obstetrics.

The change is made in the interests of harmony and in accordance with the spirit of the age which insists that there are too many medical colleges. It is hoped and believed that it will prove beneficial to all individuals concerned and to the profession in general.

ARMY AND NAVY NOTES.

The following assignments of chief medical officers of the army corps have been announced :

To 1st army corps, Lieut.-Col. Rush Huidekoper, U. S. V.
To 2d army corps, Lieut-Col. Alfred C. Girard, U. S. V.
To 3d army corps, Lieut-Col. John Van R. Hoff, U. S. V.
To 4th army corps, Lieut.-Col. Robert M. O'Reilly, U. S. V.
To 5th army corps, Lieut-Col. Benjamin F. Pope, U. S. V.
To 6th army corps, Lieut.-Col. Nicholas Senn, U. S. V.
To 7th army corps, Lieut.-Col. Louis M. Maus, U. S. V.

Appointments to the medical staff of the army have been announced as follows :

To be chief surgeons of division with rank of major : Captain William H. Arthur, assistant surgeon U. S. A., Captain George E. Bushnell, assistant surgeon U. S. A.; Donald Maclean, of Michigan ; George Ryerson Fowler, of New York.

Captains and assistant surgeons U. S. Army to be brigade surgeons, with the rank of major :

William C. Gorgas,
Henry P. Birmingham,
M. C. Wyeth,
Richard W. Johnson,
Edward C. Carter,
William O. Owen,
Peter G. Regan,
William J. Wakeman,
William Stephenson,
Adrian S. Polhemus,
John L. Phillips,
William C. Borden,
Edgar A. Meams,
Guy L. Edie,
William D. Crosby,
William L. Kneedler,
Charles M. Gandy,
James E. Pilcher,
Charles B. Ewing,
Walter D. M'Caw,
Jefferson R. Kean,
Henry I. Raymond,
Francis J. Ives,
William P. Kendall,
Edward R. Morris,
Henry S. Harris,
William B. Bannister,
Paul Clendennin,
Charles E. Woodruff,
Eugene L. Swift,
Paul S. Hillock,
Ogden Rafferty,
Charles F. Mason,
James D. Glennan.
Alfred E. Bradly,
Philip G. Wales.

To be brigade surgeons from civil life with the rank of major : Willis G. Macdonald, of New York ; Charles M. Drake, of Georgia ; Joseph K. Weaver, of Pennsylvania ; John Guiteras, of Pennsylvania

Charles E. Ruth, of Iowa; John W. Bayne, of the District of Columbia; Milo B. Ward, of Missouri; Schuyler C. Graves, of Michigan; George T. Vaughan, of Marine Hospital Service; Nathan S. Jarvis, of New York; William DeVine, of Massachusetts; John C. Martin, of Ohio; Peter D. MacNaughton, of Michigan; Samuel T. Armstrong, acting assistant surgeon; John Patterson Dodge, of Ohio; John R. M'Dill, of Wisconsin; Samuel O. L. Potter, of California; George A. Smith, of Iowa; Arthur Snowden, of Virginia; R. Stansbury Sutton, of Pennsylvania; C. Frank Bruso, of New York; George W. Crile, of Ohio; Edward Martin, of Pennsylvania; Calvin H. English, of Indiana; George B. Bunn, of Ohio; George H. Penrose, of Utah; Ernest Taylor Tappey, of Michigan.

A COMPARISON of the cost of the army and navy hospital ships is interesting at this time as showing the care the government takes of its soldiers and sailors when sick.

More than $1,000,000 has been paid for the two hospital ships, the Solace and the Relief, $450,000 of which to the Maine Steamship Company for the John Englis, which has been renamed the Relief, and is being fitted up by the war department as a floating hospital.

The price paid to the Cromwell Line for the Creole, which is now the Solace, was $600,000, making a total of $1,050,000 for the two hospital vessels. The estimated cost to the war department for fitting up the Relief is $50,000, in addition to many things that are to be presented by various organisations, which are working to aid in reducing the horrors of war as much as possible. It has been stated that about twice as much has been expended in fitting up the Solace, as the navy department had a special appropriation for the purpose and also greater facilities for doing work upon ships, as it controlled the navy yards. The total expense of procuring and equipping the two vessels will not be far from $1,250,000.

A TRAIN of hospital cars has been organised by Surgeon-General Sternberg which is now located in Florida, where it will be used as a hospital for the camp. When there are as many patients on board as it can comfortably hold, or when the patients' removal from that climate is thought to be advisable, the train will be sent to Atlanta, there to deposit the sick in the general hospital which has been established at Fort McPherson. There are branch hospitals at Fort Thomas, Ky., and at Chickamauga, and between

all these points the train will be run whenever necessary to insure the welfare of sick or wounded men. The train consists of two dining cars and ten sleeping coaches. The cars are of the tourist kind which are used in Europe. They are as comfortable, but not so elegant as the regular Pullman sleeper. The train is equipped with all necessaries and appliances, and a staff of army surgeons is attached to it.

THE governor of Pennsylvania, himself a soldier, showed his appreciation of the importance of sending forward properly equipped medical officers with the troops, by appointing two of the best-known physicians of the Keystone state to serve with an army surgeon as a board of examination, to pass upon the professional fitness and standing of all medical officers commissioned by Governor Hastings. The civilian appointees were Dr. William Pepper, of Philadelphia, and Dr. William S. Foster, of Pittsburg. The board has completed its work, having recommended fifty-five candidates for positions as surgeons and assistant surgeons of Pennsylvania volunteers. What a pity New York did not adopt a similar plan!

THE hospital ship Relief, formerly the John Englis, is preparing to sail. A few days ago the staff was ordered to muster at the vessel and form an officers mess.

The members are Dr. George H. Torney, major and surgeon-in-chief; Dr. W. C. Gorgas, major and assistant surgeon; Drs. Francis T. Metcalfe, of Buffalo, Randolph M. Meyers, of Washington, and Llewellyn P. Williamson, of St. Louis, captains and assistant surgeons; Dr. William M. Gray, of the Army Medical Museum, at Washington, microscopist, and Drs. Ernest C. Schultz, of New York, Thomas A. Smith, of New York, and Frederick McG. Hartsook, of Baltimore, acting assistant surgeons.

MRS. L. Z. LEITER, of Chicago, has presented to the government a hospital for military use at Camp Thomas. It is the building known as Chickamauga Park Hotel, at Crawfish Springs, and cost about $60,000 besides repairs. This patriotic act deserves the commendation of all men. The hospital has accommodations for 300 or 400 patients and will be, when finished, the most complete general hospital yet established with troops in the field.

ST. LUKE'S hospital, New York, is to have a soldiers' ward. The trustees lately met at the hospital and approved of the action of the

executive committee in setting aside a ward in the institution for the exclusive use during the war of soldiers and sailors who may need medical or surgical aid. Letters were read from the surgeon-general of the navy and from the surgeon-general of the army accepting the offer and thanking the hospital for making it.

Book Reviews.

PROCEEDINGS OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION at the Fifty-third Annual Meeting, held at Baltimore, May 11-14, 1897. C. B. Burr, M. D., Secretary, Flint, Michigan. Published by American Medico-Psychological Association. 1897.

This book contains the proceedings of this association at its fifty-third annual meeting, together with a list of members of the association, as well as the papers and discussions read and held at the meeting. It is a well-edited volume and is full of useful material. A book so well printed and containing so many papers of interest deserves a binding more substantial than paper. Every alienist should keep files of these transactions. The association is the oldest special society in this country.

Some of the papers offered, deserve special commendation, particularly those of Dr. Hurd, of Buffalo, on Clinical aspects of auto-intoxication; Dr. Adolf Meyer, on Demonstration of various types of changes in the giant cells of the paracentral labule, which is accompanied by three handsome full-page colored plates of ganglion cells; Report of a case of progressive dementia—clinical and pathological—by Charles K. Mills and Dr. Mary A. Schively, of Philadelphia; Industrial employment of the insane, by Dr. G. Alder Blumer; Insanity following surgical operations, by Dr. Richard Dewey; The after-care of the insane, by Henry R. Steadman; Canadian jurisprudence of insanity, by Dr. Daniel Clark; The constructive forces, by Dr. Ralph L. Parsons; The psychology of insane delusions, by Dr. W. L. Worcester. There are also able papers by other members of the society.

FAT AND BLOOD. An essay on the treatment of certain forms of neurasthenia and hysteria. By S. WEIR MITCHELL, M. D., member of the National Academy Sciences; Physician to the Orthopedic Hospital and Infirmary for nervous diseases, etc. Duodecimo, pp. 177. Seventh edition. Philadelphia: J. B. Lippincott Company. 1898.

Readers of the JOURNAL are already familiar with Dr. Mitchell's famous essay on fat and blood and need, therefore, no introduction to the same. The fact that seven large editions have been published of this essay shows deep-seated interest in this subject, and the results of reading such an admirable essay must surely not be without reward.

The chapter on massage has been rewritten and the whole work carefully revised under the direction of the author's son, Dr. John K. Mitchell.

The book is neatly printed and bound by the Lippincotts.

THE ELEMENTS OF CLINICAL DIAGNOSIS. By Professor Dr. G. KLEMPERER, Professor of Medicine at the University of Berlin. First American from the seventh (last) edition. Duodecimo, pp. 292, with 61 illustrations. Authorised translation by Nathan E. Brill, A. M., M. D., Adjunct Attending Physician Mount Sinai Hospital, New York City, and Samuel M. Brickner, A. M., M. D., Assistant Gynecologist Mount Sinai Hospital, out-patient department. New York: The Macmillan Company, 66 Fifth avenue. 1898.

The author of this little work is a practical diagnostician and his book contains the rules governing the clinical diagnosis of medical cases in his clinic at Berlin. Many Americans have taken his course and they will be pleased to have access to the work through this translation. In seven years it has gone through seven German editions, but now appears for the first time in English. The work is a concise setting forth of the elements of clinical diagnosis and will be found most helpful to the student. It is well printed and contains a number of useful illustrations. The author through the several editions has kept it abreast of medical progress, even to adding a chapter on the Röntgen rays.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, from March, 1896, to January, 1897. Editing committee: W. W. Johnston, M. D., Geo. M. Kober, M. D., and Jas. D. Morgan, M. D. Volume I. 1897.

This excellent society has issued a large and interesting volume full of scientific material that shows careful editing. The absence of an index, however, renders it well-nigh impossible to utilise it. We trust this defect may be remedied in subsequent volumes. The example of this society in preserving and publishing its work deserves imitation by other city medical organisations.

A MANUAL OF INSTRUCTION IN THE PRINCIPLES OF PROMPT AID TO THE INJURED. Including a chapter on Hygiene and the Drill Regulations for the Hospital Corps, U. S. A. By ALVAH H. DOTY, M. D., Health Officer of the Port of New York, etc. Duodecimo, pp. xvi.—302. New York: D. Appleton & Co. 1898.

We have had occasion heretofore when earlier editions were under consideration to speak well of Dr. Doty's little book, and desire now to reaffirm our former judgment after a further examination of its merits. It is a timely act on the part of the publishers to put forth a reprint of the work at this time when the information and hints it contains will prove so valuable. Every medical officer joining the medical staff of the volunteer army should provide himself with a copy and it will do him no harm to study it carefully. It contains much, too, that officers of the line should be familiar with and we doubt not they will be larger purchasers of the work. Its convenient size makes it easily carried in the field.

BOOKS RECEIVED.

Hay Fever and Its Successful Management. By W. C. Hollopeter, A. M., M. D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia; Physician to the Methodist-Episcopal Hospital, etc., etc. Duodecimo, pp. 137. Price, $1.00, net. Philadelphia: P. Blakiston, Son & Co. 1898.

Atlas and Abstract of the Diseases of the Larynx. By Dr. L. Grünwald, of Munich. Authorised translation from the German. Edited by Charles P. Grayson, M. D., Lecturer on Laryngology in the University of Pennsylvania, etc., etc. With 107 colored figures and forty-four plates. Price, $2.50, net. Philadelphia: W. B. Saunders. 1898.

Modern Gynecology. A Treatise on Diseases of Women. Comprising the results of the latest investigations and treatment in this branch of medical science. By Charles H. Bushong, M. D., Assistant Gynecologist and Pathologist to the Demilt Dispensary, New York; formerly Attending Physician to the Northern Dispensary, New York. Illustrated. Second edition, enlarged. New York: E. B. Treat & Co. 1898.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume XIV., Infectious Diseases. New York: William Wood & Co. 1898.

Atlas of Legal Medicine. By Dr. E. v. Hofmann, Professor of Legal Medicine and Director of the Medico-Legal Institute at Vienna. Authorised translation from the German. Edited by Frederic Peterson, M. D., assisted by Aloysius O. J. Kelly, M. D. Fifty-six plates in colors and 193 illustrations in black. Price, $3.10 net. Philadelphia: W. B. Saunders. 1898.

Medical and Surgical Report of the Presbyterian Hospital in the City of New York. Edited by Andrew J. McCosh, M. D., and Walter B. James, M.D. Volume III. January, 1898.

Diseases of the Stomach. A Text-book for Practitioners and Students. By Max Einhorn, M. D., Instructor in Clinical Medicine at the New York Post-Graduate Medical School and Hospital; Visiting Physician to the German Dispensary. Second revised edition. 502 pages. Price, cloth, $3.25 net; flexible leather, $3.75 net. New York: William Wood & Co. 1898.

Diseases of the Skin. Their Constitutional Nature and Cure. By J. Compton Burnett, M. D. Third edition, revised and enlarged. Price, cloth, by mail, $1.07 net. Philadelphia: Boericke & Tafel. 1898.

Yellow Fever. Clinical Notes. By Just Tonatre, M. D. (Paris), Member Board of Experts Louisiana State Board of Health. Translated from the French by Charles Chassaignac, M. D., President New Orleans Polyclinic; Editor New Orleans Medical and Surgical Journal. New Orleans: New Orleans Medical and Surgical Journal, Limited. 1898.

ITEMS.

Wyatt Wingrave (London *Lancet*, May 7, 1898,) mentions a personal necessity that arose in the writer's experience for a reliable starch digestant. A crucial comparative examination was therefore made of many malt extracts and of taka-diastase, the tests being conducted both chemically and clinically. He summarises briefly: (1) That taka-diastase is the most powerful of the starch or diastatic ferments and the most reliable since it is more rapid in its action—viz., "it

will convert a larger amount (of starch) in a given time than will any other amylolytic ferment." (2) That taka-diastase seems to be less retarded in its digestive action by the presence of the organic acids butyric, lactic, acetic and also by tea, coffee and alcohol, than are saliva and the malt extracts. This is an important point in pyrosis. (3) That all mineral acids, hydrochloric, etc., quickly stop and permanently destroy all diastatic action if allowed sufficient time and if present in sufficient quantities. (4) That taka-diastase and malt diastase have, like ptyalin, no action upon (cellulose) uncooked starch. All starch food should therefore be cooked to permit of the starch ferment assisting nature in this function.

WAMPOLE'S war atlas with marginal index is one of the most useful articles ever sent out by a manufacturing pharmacist to the profession. It contains the flags of the nations, in minature, a map of the world, of North America, of Europe, of Spain and Portugal, of the West Indies, of Cuba, of China and the Phillipines and of the United States. Nothing could be more helpful to every physician at the present time, and our appreciative thanks is hereby tendered for the one sent us. The maps are made by the well-known house of Rand, McNally & Co., Chicago. The atlas can be obtained by addressing Messrs. H. K. Wampole & Co., manufacturing pharmacists, 441 Green street, Philadelphia, Pa.

THE Doliber-Goodale Company, of Boston, announces that it has changed its name to Mellin's Food Company of North America. There has been no change in the organisation of the company nor in its management; the change is a change of name only.

MESSRS. G. W. Flavell & Brother, of Philadelphia, announce that it is their desire to extend their appreciation to the medical profession of the continued favor manifested toward their line of goods, by stating that there will be no advance in prices for goods on account of any stamp war tax.

JOHN WYETH & BROTHER, of Philadelphia, merit full confidence as to any statement made concerning their products. We take pleasure in calling the attention of our readers to the advertisement of their solution iron and manganese peptonate. This combination ought to be a valuable agent in building up debilitated anemic conditions. As a blood-maker, tonic and general roborant, it claims the attention of the profession whenever such reconstructives are indicated.

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